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Cover: Snowy Owl at Annapolis, Jan. 3, 1974
Photo by Hal Wierenga. See page 36.



THE MARYLAND CHRISTMAS COUNTS OF 1973

Paul G. Bystrak

The 1973 Christmas Counts, blessed by favorable weather and an increase in participation, were easily the best ever in Maryland. Over half the counts broke or tied their previous record number of species, total participation increased over 15% (while losing one count), and the Ocean City count set a record for the highest number of species ever on a Maryland count. All this occurred in spite of an energy "crisis" and the loss of a few species on some of the counts through reclassification by the AOU (See *Md. Birdlife* 29:19).

The State total of 187 species found on this year's counts ties the record set in 1971, and included 5 species never before recorded in winter in Maryland; a Black Rail at Blackwater, and American Golden Plover, Nashville and Blackburnian Warblers, and Clay-colored Sparrow at Ocean City. Other winter oddities included a Common Gallinule at Blackwater, an Orange-crowned Warbler at Point Lookout, and 4 counts with Goshawks.

As for the more regular species, the mild weather seemed to be a benefit to the semi-hardy species. Some continued their phenomenal increases of recent years. As an example, Carolina Wrens increased about 53% and Eastern Bluebirds 52% over 1972, which, if you remember, was an excellent year for them! Carolina Wrens are now at the highest population we have ever had, a situation which will unfortunately probably not continue. In addition, many non-hardy species that winter in small numbers, if at all, were more widespread and common. Eastern Phoebe, Catbird, House Wren, and Yellowthroat are examples. Eagles and hawks, especially accipiters and Red-shoulders, had a good year as well, which is gratifying in view of the miserable recent counts. The total of 5 Golden Eagles found on 3 counts was certainly unique.

However, mild weather does not necessarily mean good counts of all species, since hardy species may stay north of here. It was a poor year in Maryland for northern finches, Red-breasted Nuthatches, and some ducks. The harder sparrows, such as White-throat and Tree Sparrow, were low also, probably indicating that they are staying north, rather than decreasing. Inexplicably, it was also the worst year ever for the Fox Sparrow, a species that has been just about lost from our winter fauna. They decreased 26% this year, after decreases of 51% and 73% in the two preceding years.

Three counts deserve special mention for outstanding results. The first is Ocean City, which, as previously mentioned, set a new record for a Maryland count with 158 species. There were 24 new record high counts, no mean feat after 26 years! Examples are 20 Sharp-shinned Hawks, 44,000 Canada Geese, 7710 Snow Geese, and 655 Bonaparte's Gulls. Where else can you find 9 species of gulls in one day? The inlet on that day had Great Black-backed, Lesser Black-backed, Herring, Ring-billed, Black-headed, Laughing, Bonaparte's, and Little Gulls plus Black-legged Kittiwake. It will also be the only Maryland count for many years to have had 6 species of warblers!

The incredible effort put forth on the Bowie count deserves special recognition as well. Although a new count in 1972, it has attracted the kind of rabid support that will make it a serious contender for national high in a good many species. Some examples are 70 Red-shouldered Hawks, 298 Yellow-shafted Flickers, 39 Pileated, 269 Red-bellied, 116 Hairy and 312 Downy Woodpeckers, 1160 Carolina Chickadees, 659 Tufted Titmice, 105 Brown Creepers, 105 Winter Wrens, and 728 Carolina Wrens. I've heard that Cincinnati beat many of these totals, but next year, who knows?

Probably the most amazing count was done in Garrett County during the December "blizzard" with its heavy snow and subfreezing temperatures. The singular hospitality of the Popes supplied the birders, and a fortuitous chain of weather events supplied the birds. The snowstorm coming out of the south "grounded" a large number of migrating waterfowl on the open parts of Deep Creek Lake. The result was 21 species of waterfowl plus Ring-billed and Bonaparte's Gulls. The 757 Redheads were equal to about 40% of the total Chesapeake Bay population at that time. The McHenry party claims the distinction of being the first party to single-handedly break an established count's record by 4 species. Watch for this count in the April issue of *American Birds*; it may be the first count to be printed entirely in boldface!

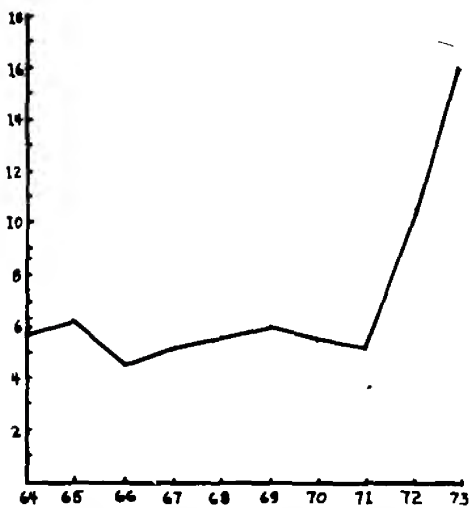


Fig. 1 Carolina Wren Trends

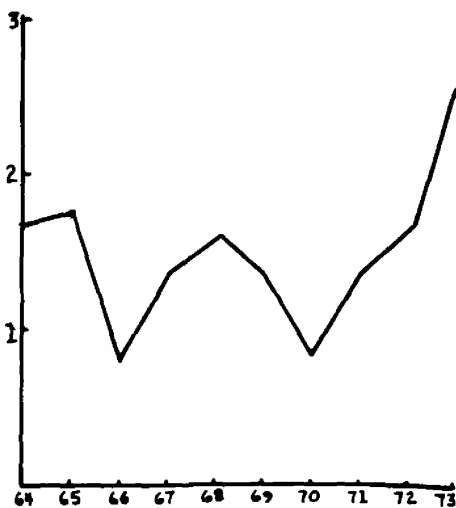


Fig. 2 Eastern Bluebird Trends

In view of the energy "crisis" special mention should go to the bicycle parties on the Bowie (Paul McKenzie and Dave Linehan) and Denton (Steve Westre) counts, who together logged 11 gas-saving miles. Honorable mention should also go to Clay and Tommy Andres, who put in 4 miles in their canoe on the Blackwater and Ocean City counts. And speaking of energy, Chan Robbins displayed no lack of same by attending 9 counts. And anyone who has tried to keep up with him knows he isn't there just for ceremony. Next most active participant was Paul McKenzie, who made 8 counts.

In Figures 1 through 6, results for the past ten years for selected species have been graphed. To correct for variations in coverage, the figures used are numbers of birds per 10 party-hours.

In Figures 1 and 2 are species that are considered semihardy and increasing. Note the similarity in the patterns of these two, although Carolina Wrens have increased much more dramatically than have Eastern Bluebirds. An extension of the graph back to 1955 would reveal that Carolina Wrens are at their highest population since there have been enough counts to measure their population; they have more than recovered from their crash in 1961. Bluebirds, in spite of gains, are still not up to "precrash" populations.

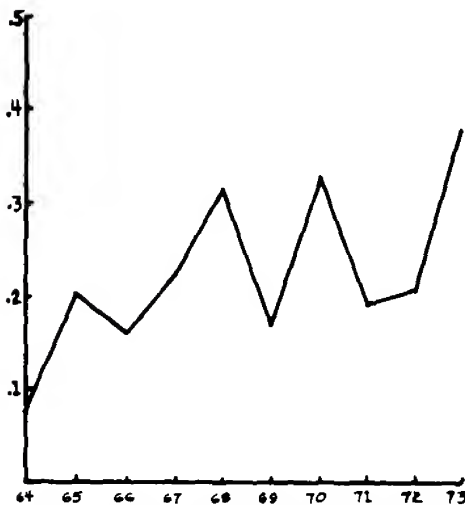


Fig. 3 Sharp-shinned Hawk Trends

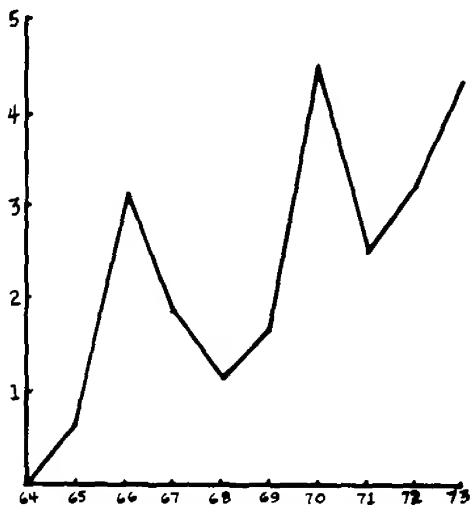


Fig. 4 House Finch Trends

Figures 3 and 4 demonstrate migratory species that are generally increasing. Sharp-shins, which appear to be recovering from their low of the sixties, were common enough this winter to cause some consternation over their appearance as "feeder birds"! House Finches continue to increase and spread in the East. Also interesting was the finding of House Finches by Rich Rowlett in the Ohio drainage of Maryland on the Garrett Christmas Count. We can perhaps look forward to their spread westward as well as southward.

Figures 5 and 6 demonstrate species that have decreased rapidly as wintering birds in Maryland in the past several years. The White-throats are beginning to increase again; hopefully the Fox Sparrows will do the same. Although there is probably no relationship, note that the high and low points of Eastern Bluebird and Fox Sparrow are almost perfectly opposed. Good years for bluebirds were poor years for Fox Sparrows and vice versa.

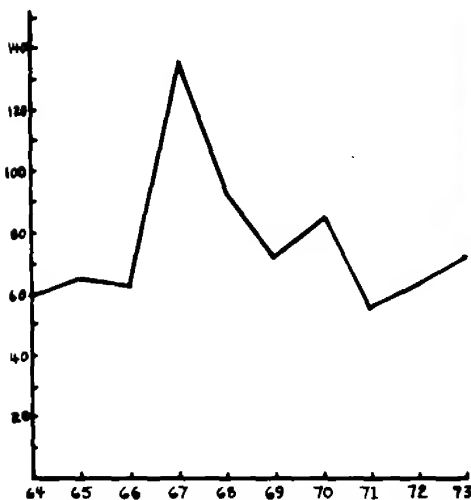


Fig. 5 White-throated Sparrow Trends

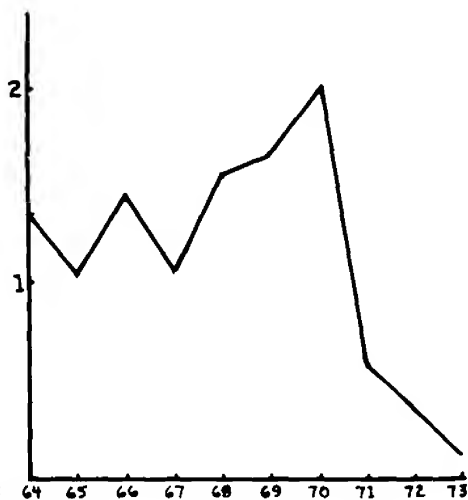


Fig. 6 Fox Sparrow Trends

Following is an annotated list of Maryland Christmas Counts for the 1973 season, presented as in the past from northern-most to southern-most regions:

GARRETT COUNTY - 19 observers, 80 party-hours (47 on foot).
78 species, 7,406 individuals. Previously discussed in detail.

ALLEGANY COUNTY - 15 observers, 53 party-hours (33 on foot).
67 species, 3,907 individuals. An Eastern Phoebe was out of place here; 17 Ruffed Grouse and 3 Common Ravens were outstanding.

WASHINGTON COUNTY - 19 observers, 63 party-hours (19 on foot).
62 species, 1,910 individuals. A Horned Grebe, Brown Thrasher, and Snow Bunting were good birds for that part of the State.

CATOCTIN MOUNTAIN - 19 observers, 75 party-hours (45 on foot).
67 species, 281,855 individuals. Common Raven, American Widgeon and House Finch new to count. Highest individual total in State, thanks to a blackbird roost that later gained national notoriety.

SENECA - 77 observers, 231 party-hours (165 on foot).
101 species, 29,715 individuals. Many outstanding totals: 1960 Cardinals, 3445 Slate-colored Juncos are examples. 13 Bonaparte's Gulls, 100 Eastern Bluebirds, Palm Warbler, House Wren, 7 Eastern Phoebes, and a Yellowthroat were good birds here.

BALTIMORE - 52 observers, 199 party-hours (122 on foot).
85 species, 23,314 individuals. 19 species had new highs, including Great Black-backed Gull which was double the previous high. An Eastern

Phoebe was a good bird in the northern Maryland Piedmont.

ROCK RUN - 9 observers, 51 1/2 party-hours (11 1/2 on foot).

71 species, 6,722 individuals. High tally of 153 Great Black-backed Gulls.

ELKTON - 13 observers, 43 party-hours (28 on foot).

67 species, 21,423 individuals. A Laughing Gull was a good bird this far up the Chesapeake Bay.

BOWIE - 57 observers, 238 party-hours (168 on foot).

98 species, 47,510 individuals. In addition to earlier discussion there were also 2 Bald Eagles during the count week.

ANNAPOLIS - 46 observers, 147 party-hours (75 on foot).

98 species, 43,995 individuals. 10,779 Canvasbacks, an Eastern Phoebe, a Long-eared Owl, and 4 Bald Eagles were the best finds. The Snowy Owl seen during the count period was definitely well seen!

ACCOKEEK - 4 observers, 32 party-hours (all on foot).

63 species, 2,746 individuals. The 42nd consecutive running of our most continuous count. Redhead new to count.

POINT LOOKOUT - 28 observers, 123 party-hours (91 on foot).

113 species, 34,997 individuals. The highest count ever on the Western Shore. 2 Short-billed Marsh Wrens, 13 Great Cormorants, 3 Bald Eagles, and 4977 Oldsquaws were the best finds on this count.

LOWER KENT - 44 observers, 166 party-hours (82 on foot).

119 species, 127,260 individuals. 97,755 Canada Geese will probably earn a national high. Also good were 98 Black Vultures, 7 Bald Eagles, a Sora, 3 Eastern Phoebes, 12 Brown-headed Nuthatches, and 7 Pine Warblers.

DENTON - 17 observers, 68 party-hours (41 on foot).

81 species, 15,360 individuals. An Eastern Phoebe, 4 Loggerhead Shrikes, 8 Barred Owls, 27 Common Mergansers, and 1162 Whistling Swans led the way to a record high for the Denton Count.

ST. MICHAELS - 27 observers, 103 party-hours (68 on foot).

102 species, 89,175 individuals. Good birds included a Dickcissel, Goshawk, and American Bittern. 45 Eastern Bluebirds and 46,000 Canada Geese were considered good totals.

SOUTHERN DORCHESTER - 35 observers, 158 party-hours (124 on foot).

123 species, 95,240 individuals. 46,800 Canada Geese, 7 Common Egrets, Glossy Ibis, 21 Blue-winged Teal, 21 Bald Eagles, 3 Golden Eagles, and 2 Peregrine Falcons helped make it the best year ever for the "Blackwater" count.

SALISBURY - 15 observers, 45 party-hours (8 on foot).

73 species, 29,298 individuals. A Pine Warbler and Common Loon were unusual for this count, and a Bald Eagle was seen during the period.

CRISFIELD - 30 observers, 145 party-hours (109 on foot).

128 species, 253,956 individuals. Last year this was described as the best rail spot in the State; this year we call it the best in the country with 129 Virginia Rails (double the previous record for all Christmas Counts), 12 Soras, 7 Clapper and 63 King Rails. Other good birds include 14 Yellowthroats, 55 Long-billed Marsh Wrens, Nashville Warbler, and 1 each of Bald and Golden Eagles.

OCEAN CITY - 43 observers, 177 party-hours (134 on foot).

158 species, 225,235 individuals. Discussed in detail earlier.

CHRISTMAS BIRD COUNTS ON M.O.S. SANCTUARIES

CAREY RUN - Jan. 13, 1974. Clear, calm, 10°. 8 a.m. to 4 p.m. 3 miles on foot.
John B. Willetts, Bill Drulin.

Sharp-shin Hawk	1	Common Crow	5	Cardinal	14	Tree Sparrow	15
Ruffed Grouse	2	Black-cap Chick	37	Evening Grosbk	23	Song Sparrow	2
Downy Woodpecker	3	Tufted Titmouse	13	Am. Goldfinch	6	14 species	
Blue Jay	4	White-br. Nut.	4	Slate-col Junco	47	181 individuals	

IRISH GROVE - Dec. 28, 1973. Clear, 0-10 m.p.h., min. 36°. 6 a.m. to 6 p.m.
19 party-hours and 20 party-miles on foot, 4 miles by car.

Linda, Paul and Steve Bystrak and George Robbins.

Gt Blue Heron	11	Bobwhite	10	Tree Swallow	8	Myrtle Warbler	675
Common Egret	1	King Rail	14	Blue Jay	2	Pine Warbler	1
Canada Goose	154	Clapper Rail	5	Common Crow	86	Yellowthroat	4
Snow Goose	20	Virginia Rail	53	Fish Crow	8	House Sparrow	1
Mallard	5	Sora	7	Caro. Chickadee	37	E. Meadowlark	10
Black Duck	77	Am. Woodcock	1	Red-br. Nuthat.	1	Red-wing Blkbd	8064
Pintail	4	Common Snipe	5	Brown-head Nut.	53	Boat-tail Grack	137
Green-wing Teal	4	Gr. Yellowlegs	2	Brown Creeper	2	Brown-hd Cowbird	2
Canvasback	2	Lr. Yellowlegs	1	House Wren	3	Cardinal	35
Greater Scaup	68	Dunlin	84	Winter Wren	6	Pine Siskin	8
Bufflehead	1	Herring Gull	21	Carolina Wren	53	Am. Goldfinch	16
Hooded Merg.	8	Ring-bill Gull	19	Long-bil M Wren	36	Red Crossbill	17
Turkey Vulture	63	Laughing Gull	1	Short-bil M Wren	2	Rufous-s. Towhee	12
Black Vulture	2	Mourning Dove	127	Mockingbird	7	Savannah Sparrow	23
Sharp-shin Hawk	1	Barn Owl	2	Catbird	6	Sharp-tailed Sp.	11
Cooper's Hawk	1	Screech Owl	5	Brown Thrasher	14	Seaside Sparrow	7
Red-tailed Hawk	2	Gt Horned Owl	6	Robin	415	Slate-col Junco	6
Red-shoulder Hk	1	Short-eared Owl	1	Hermit Thrush	14	Field Sparrow	4
Rough-legged Hk	2	Belted Kingfish	9	Eastern Bluebird	3	White-throat Sp.	76
Golden Eagle	1	Yel-sh Flicker	28	Golden-c Kinglt	17	Fox Sparrow	1
Marsh Hawk	18	Red-bellied Wd	6	Ruby-cr Kinglet	10	Swamp Sparrow	96
Pigeon Hawk	1	Yellow-b Sapskr	2	Cedar Waxwing	9	Song Sparrow	66
Sparrow Hawk	3	Hairy Woodpecker	2	Starling	164	92 species	
		Downy Woodpkr	8			11,107 individuals	

MILL CREEK - Dec. 30, 1973. Clear, 10 m.p.h., 40°. 3 parties, 2 hours each.
6 miles on foot. Richard L. Kleen, Robert Sharp, Jeff Effinger.

Whistling Swan	55	Downy Woodpecker	9	Hermit Thrush	4	Pine Siskin	26
Canada Goose	417	Blue Jay	65	Golden-c Kinglet	6	Am. Goldfinch	28
Black Duck	4	Common Crow	10	Ruby-cr Kinglet	4	Rufous-s Towhee	8
Turkey Vulture	4	Fish Crow	1	Starling	2	Slate-col Junco	55
Black Vulture	1	Caro. Chickadee	33	Myrtle Warbler	11	Field Sparrow	8
Bobwhite	34	Tufted Titmouse	24	House Sparrow	2	White-throat Sp.	76
Mourning Dove	5	Brown Creeper	3	E. Meadowlark	2	Swamp Sparrow	6
Belted Kingfish	1	Winter Wren	1	Red-wing Blkbd	47	Song Sparrow	29
Yel-sh Flicker	21	Carolina Wren	13	Common Grackle	8		
Red-bellied Wd	11	Mockingbird	2	Cardinal	26	41 species	
Hairy Woodpkr	1	Robin	6	Evening Grosbk	2	1,071 individuals	

ROCK RUN - Dec. 30, 1973. Overcast, 40°. 8 to 9 a.m. John Wortman.

Ring-bill? Gull	2	Downy Woodpecker	1	White-br. Nut.	1	Rufous-s. Towhee	1
Gt Horned? Owl	1	Common Crow	7	Carolina Wren	11	Slate-col Junco	4
Belted Kingfish	1	Caro. Chickadee	4	Golden-c Kinglet	3	White-throat Sp.	15
Red-bellied Wd	3	Tufted Titmouse	7	Cardinal	13	15 species, 94 indiv.	

Total: 99 species on Sanctuary Christmas Counts.

LOWER CHESAPEAKE HERONRIES OF MARYLAND SMITH ISLAND TO BARREN ISLAND

Henry T. Armistead

INTRODUCTION

Within a stretch of no more than twenty-five miles on the lower Chesapeake Bay are at least ten thriving heron colonies. All are markedly different both in species composition and number of breeding pairs present. There is also a fair amount of diversity with respect to the actual physical sites of these heronries. In 1973 their populations ranged from 19 to 1013 pairs of from one to ten species (see Table 1). From May through July 1973 I made brief visits to these noisy, raucous colonies. These stimulating trips took me to some of the most inaccessible and least birded regions of the Bay. Using my fourteen foot fiberglass boat, eighteen horsepower outboard engine, and boat trailer I was able to visit all of the heronries here described in only four trips. Several places were later revisited.

These areas are available to anyone with a few free days, a small, shallow draft boat and mild weather. However, it is generally a poor idea to visit heronries at all, unless for the purposes of a specific project, such as banding or censusing, and even then for as brief a period and as inconspicuously as possible. Colonies certainly should not be entered merely for recreational birding or idle photography. Human intrusion is tremendously disruptive. Eggs and small young can be dislodged or fatally overexposed to sun, heat, precipitation or cold. Many larger young may panic, clamber inexpertly among the branches, sometimes fall, become injured, or end up far from the nest site, further delaying reunion with their anxious parents. Furthermore, the clouds of large colorful birds rising off their nests sometimes attract other human intruders, perhaps not sympathetic or sensitive to the vulnerability of the birds. Heronries are better observed at a distance without entering them at all. Besides, they are usually smelly and hot as well as full of dense vegetation, poison ivy, and noxious insects.

In this article, the word herons excludes the two species of bitterns. Included are all ten species of "herons" which regularly breed in Maryland: the species named heron, the three egrets, and the Glossy Ibis. These are the ones indicated in Table 1. Throughout this paper, "e" indicates eggs and "y", young. In the tables for the individual heronries (Tables 3-9) the grand totals are the total number of nests estimated to be in a colony. The totals are the number of nests actually examined and noted for each species when the contents were recorded. Consult Fig. 1 for the locations of these places.

SMITH ISLAND - GENERAL

Smith Island, Md.-Va., is actually a complex of islands and long, tortuous, and extremely shallow tidal-guts extending from over six miles.

Table 1. Summary of Lower Chesapeake Bay, Md., Heronries, Summer 1973
(colonies arranged approximately from north to south)

	TOTAL	Barren	Blood	DIWMA	Adam	LDI	Holld	Cherry	Wop	Ewell	Kelly	#
Great Blue Heron	368	55	180	70	8	-	25	25	-	-	5	7
Green Heron	58	5	20	-	5	5	5	-	5	8	5	8
Littl Blue Heron	293	75	-	-	-	25	70	-	33	20	70	6
Cattle Egret	489	449	-	-	-	-	-	-	-	-	40	2
Common Egret	177	77	30	-	-	15	15	30	-	-	10	6
Snowy Egret	320	155	X	-	-	80	20	-	15	-	50	6
Louisiana Heron	134	1	-	-	-	20	5	-	48	30	30	6
Black-cr. Night	171	31	5	-	-	20	15	-	45	30	25	7
Yellow-cr. Night	92	-	3	-	6	5	20	-	3	40	15	7
Glossy Ibis	400	165	-	-	-	30	25	15	70	60	35	1
Total pairs	2502	1013	238	70	19	200	200	70	219	188	285	-
Species total	10	9	6	1	3	8	6	3	7	6	10	-

Colonies and abbreviations:

- Barren: Barren Island, Dorchester Co.
 Blood: Bloodworth Island, Dorchester Co.
 DIWMA: Deal Island Wildlife Management Area, Somerset Co.)
 Adam: Adam Island, Dorchester Co.
 LDI: Little Deal Island, Somerset Co.
 Holld: Holland Island, Dorchester Co.
 Cherry: Cherry Island, Somerset Co. (Smith Island, G. L. Martin N. W. R.)
 Wop: Wop Island, Somerset Co. (Smith Island, G. L. Martin N. W. R.)
 Ewell: Ewell, Somerset Co. (Smith Island)
 Kelly: Kelly Island, Somerset Co. (Smith Island)
 #: Number of heronries in which a species was found nesting.
 X: Snowy Egrets observed nesting on Bloodworth Island from a distance, but their colony was not investigated.

north of the invisible state boundary to about nine miles south of it. The southern part runs along a long sand/marsh ridge, which merges into the Tangier Island (Va.) group of marsh and tidal guts. Near the state border, at Rhodes Point, a long row of high poles stretches along this sandy ridge in a straight line as far as one can see. It was a foreboding, windswept, and lonely region on the hazy June day when I passed it in my boat, the poles seeming to beckon one deeper into Virginia. One imagines generations of Sanderlings and, perhaps Snow Buntings have wintered in this area unseen. Of course this entire area is visited by watermen every day, but the average, displaced, desk-bound city person alone in a small boat here can feel quite awed by these surroundings.

The entire Tangier Island area needs to be thoroughly investigated by birders, as do the nearby Fox Islands and Watts Island, and the rest of the marshes on the Bay side of the Eastern Shore of Virginia. Frederic R. Scott (pers. comm.) has flown over Watts Island while participating in the Bald Eagle nest survey. He says there is a large Great Blue Heron colony here together with many Osprey nests. No doubt there are other heronries down there not yet discovered. Fred has also called my attention to some intriguing old citations which indicate that Piping Plovers may nest in the Virginia part of Chesapeake Bay (White, 1891). The Tangier Island-Smith Island area is unique in its isolation and is the subject of occasional writing (Maloney, 1939; Wheatley, 1973; Wood, 1952).

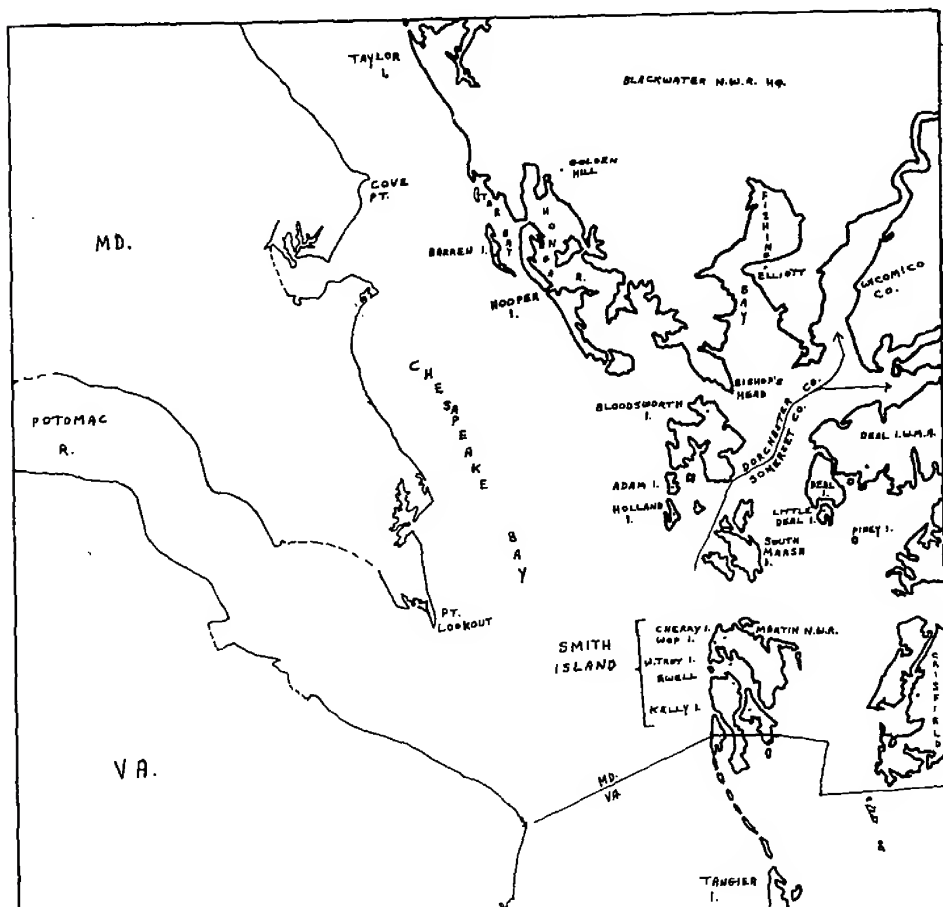


Fig. 1. Islands of the Lower Eastern Shore and Adjacent Areas

On most of these islands from Bloodworth Island on south are high ridges that rise out of the *Juncus roemerianus* and *Spartina* grasses just high enough for full-sized trees and large bushes to become established. These are the areas where herons and ibis nest. These hammocks are a distinctive part of the Eastern Shore. On an unusually high flood tide these may be the only areas of some of these islands that are above water. The difference of a few feet is enough to sustain large deciduous trees, loblolly pines, red cedars, poison ivy, honeysuckle, wax myrtle, and other plants. The difference of only inches is enough for some bushes such as *Baccharis halimifolia* and *Iva frutescens*. Slightly lower down in the marsh, *Spartina patens* is found in low, grassy meadows just above the level of *Juncus roemerianus* and *Spartina alterniflora*. The hammocks in addition to attracting nesting herons also have certain landbirds often associated with them: Eastern Kingbird, Fish Crow,

House Wren, Carolina Wren, Catbird, Yellowthroat, Boat-tailed Grackle, Cardinal, and Song Sparrow. On islands such as Elliott Island, that are connected to the mainland by marshes, additional species occur commonly such as American Woodcock, Screech Owl, Great Horned Owl, Yellow-shafted Flicker, Tree Swallow, Carolina Chickadee, Brown-headed Nuthatch, Yellow Warbler, and Brown-headed Cowbird.

There are numerous hammocks in the Smith Island area, some of them reputed to be the result of slave labor. They are extensive enough to support three small towns here: Ewell, Rhodes Point, and Tylerton. Ewell and Rhodes Point are connected by a narrow but paved road about two miles long, which passes through salt marsh most of the way. I walked along this road on June 4, 1973, between 9 and 10:30 P.M. It was a perfect night for rails: calm, clear, and warm. Although I had hoped to hear Black Rails, there were none, but Clapper Rails were calling continuously. At times there was a sustained, loud chorus of them, as perhaps ten or a dozen called for two or three minutes straight. I estimated 46 rails, but perhaps there were double that.

Smith Island's abandoned cars and trucks, formerly discarded at random, have been collected by the U. S. Navy and are now concentrated in one pile along this road. This pile is one of the island's spectacles. It is perhaps one hundred yards long and from six to fifteen feet high. The windrows of trash and garbage which the islanders add to this assemblage, during extreme flood tides, result in numerous bottles washing to rest on the road connecting these two towns, further endangering the remaining viable vehicles. Perhaps this grotesque heap is attractive to owls and hawks during the winter. Smith Islanders acquire used cars on the mainland and bring them over in an old Navy landing ship. Once on the island they enjoy minimal maintenance and a salty, corrosive, windswept climate, which ensures their rapid deterioration. Many residents and most cars are neither licensed nor registered. Some cars may be heard all over the island, their engines missing as they hit on only a few cylinders.

The Maryland state police felt threatened by all of this. By coincidence they were at Smith Island when I was there, issuing the first traffic tickets in the history of the island (*Philadelphia Inquirer*, July 29, 1973, p. 2-C, "Smith Islanders initiated to the law."). When they left Ewell for the mainland, one of the officers was carrying a confiscated marijuana plant, somewhat belying the trite image of the island promulgated in most of the area guidebooks (Blanchard, 1968; Carter, 1971). But to be sure, there are still plenty of white frame houses and Methodist churches, sleek traditional fishing boats, and crab houses on pilings. And the maritime atmosphere is strong. From one of the crab houses at Tylerton hangs an enormous sea turtle skull. Next to it is another bleached skull, either a porpoise or small whale. Tradition is very pervasive here. William Julian, manager of Blackwater National Wildlife Refuge, told me that Smith Island is about the only place in the state where Black Ducks are still trapped illegally. Both Smith and Tangier Islands are inhabited by colorful, independent people. There are many stories of outsiders being accorded unfriendly treatment. With

organized tours, television, and the other socializing influences, it is impossible for anyone to escape these days; the Smith Island stories will soon pass into history. During my five-day stay I was exposed to nothing but friendly gestures and good will.

Upon finishing my Clapper Rail count along the Ewell-Rhodes Point road a young man stopped to offer me a ride back to Ewell. He had been drinking heavily and I would just as soon have had a few more minutes with the rails. But it was the fourth time he had offered me a ride. My resistance was down and I sensed a further refusal would have been tantamount to insult. As I climbed in I was assured, "Don't worry. I'm not going to beat you up because you're a stranger." When I explained that I had just made what was probably a record Clapper Rail count for Maryland his reaction was a mixture of disbelief and profanity. As we pulled out down the road he revealed that he had .."flipped her three times and had her going ninety once." Fortunately his car was in such bad shape that it would not exceed thirty-five, fast enough for that road. An hour and three beers later after cruising back and forth several times the length of the road I was finally able to escape this compulsive, enforced companionship just as he was starting to reminisce about his Viet Nam tour. In spite of a couple of experiences of this ilk, I found that the traditional image of islanders as self-reliant, sober Methodist watermen undoubtedly holds true for most of the area. Most residents of the islands are of British ancestry. Smith Island is named for Captain John Smith, who explored this island in 1607.

One source of friction has been the Glen L. Martin National Wildlife Refuge, which occupies 4,423 acres or about the northern half of Smith Island. It was established in 1954 (U.S. Fish & Wildlife Service, 1971). There is always a certain amount of resentment by local persons when Federal agencies take over areas where they have hunted, fished, and trapped at will all of their lives. When use of these places, especially hunting, is suddenly restricted it is not surprising that a certain amount of bad feeling develops. In the case of the Martin refuge, the observation tower was torn down. Fortunately the refuge has an able watchguard in Stanley Marshall, a native of Ewell, who is studying the thirty or so refuge Osprey nests. Most of these are on artificial platforms (Rhodes, 1972). I was touched by Mr. Marshall's indignation as he described how someone he knew had shot most of the area's American Oystercatchers several years ago.

With the passage of time and the presence of resident biologists such as Stanley Marshall, hopefully Smith Islanders will come to tolerate the refuge more easily. Persons planning to visit the interior of the refuge are advised to obtain permission in advance from Refuge Manager Julian at Blackwater refuge for several reasons. The waterways are very complex as well as shallow. Without much trouble even a small boat can get stuck or lost up some ditch or gut on a falling tide. It is twelve hours until the next high tide, which will be at night! Another reason is the obvious human disturbance factor affecting colonial waterbirds. It should be emphasized that the Martin refuge does not have facilities to encourage much public visitation.

Table 2. Birds Observed in the Vicinity of Glen L. Martin National Wildlife Refuge, Smith Island, Maryland, June 1-5, 1973

SPECIES	June 1	2	3	4	5	SPECIES	June 1	2	3	4	5
Double-crested Cormorant	-	-	2	1	-	B Common Tern	12	x	x	x	x
B Great Blue Heron	x	x	30	25	x	Least Tern	-	2	-	2	2
B Green Heron	x	x	9	20	x	Royal Tern	4	-	-	-	-
B Little Blue Heron	3	x	15	65	x	b Chimney Swift	4	3	2	3	-
B Cattle Egret	15	8	9	65	x	b Eastern Kingbird	-	2	2	2	x
B Common Egret	3	x	25	25	x	B Barn Swallow	x	20	x	7	x
B Snowy Egret	10	x	30	40	x	b Purple Martin	x	70	x	x	x
B Louisiana Heron	6	15	20	55	x	Blue Jay	3	6	6	36	6
B Black-cr. Night Heron	3	x	3	60	-	Common Crow	-	-	-	3	-
B Yellow-cr. Night Heron	8	84	15	50	x	B Fish Crow	x	20	20	25	x
B Glossy Ibis	x	x	100	145	x	b Carolina Wren	1	5	1	-	-
b Black Duck	8	10	20	10	x	b Long-billed Marsh Wren	4	3	4	5	-
Common Goldeneye (cripple)	-	-	-	1m	1m	b Catbird	-	-	-	2	-
Marsh Hawk	-	-	-	1f	-	b Starling	x	8	20	15	x
B Osprey	x	x	x	20	x	Red-eyed Vireo	-	1	-	-	-
b Clapper Rail	4	6	10	46	5	b Yellowthroat	1	4	7	7	-
American Oystercatcher	1	1	1	3	1	b House Sparrow	x	15	12	17	x
Black-bellied Plover	-	3	-	1	-	b Red-winged Blackbird	x	10	6	6	-
Spotted Sandpiper	1	-	-	-	-	B Boat-tailed Grackle	x	30	35	45	x
b Willet	15	30	20	20	x	Common Grackle	-	-	-	-	1m
Knot	-	1	-	-	-	Brown-headed Cowbird	3	1f	-	2	3
Dunlin	-	3	-	2	-	b Cardinal	1	-	1	2	-
Semipalmated Sandpiper	35	87	4	71	47	Indigo Bunting	-	1m	1m	1m	-
Great Black-backed Gull	8	6a	x	5	x	American Goldfinch	-	-	1m	-	-
B Herring Gull	900	1400	x	x	x	B Seaside Sparrow	7	35	30	65	x
Ring-billed Gull	-	-	1	-	-	b Song Sparrow	5	12	9	14	x
Laughing Gull	15	55	65	x	x	Total species	38	43	41	45	32
Forster's Tern	-	3	1	-	-	Grand total:	54 species				

Abbreviations: a: adult. b: no definite breeding record obtained, but almost certainly nests.
 B: definite breeding record (nest, eggs, or flightless young seen). f: female. m: male.
 x: species seen but numbers unrecorded. -: species unseen.

In keeping with its isolated and remote location, Smith Island's wildlife is rather limited. Mink, otter, muskrat, and a few deer are the only large mammals. Rabbits and raccoons are absent. During my five-day visit the following common birds were notable for their absence in spite of the presence of considerable dense vegetation on the hammocks as well as lawns and shade trees around the towns: all woodpeckers; all flycatchers except Eastern Kingbird; House Wren, Mockingbird, Brown Thrasher, Robin, Yellow Warbler, Eastern Meadowlark, Orchard Oriole, and Chipping Sparrow. Certain marsh birds were unexpectedly scarce, notably Long-billed Marsh Wren (highest total, 5) and Red-winged Blackbird (highest total, 10). Birds seen are listed in Table 2.

SMITH ISLAND - BIRD COLONIES

WOP ISLAND

So-called "Wop" island, one is told, derives its name from the call of night herons. It is located on a long, narrow ridge about one mile north of the Ewell inlet on the west side of the Martin refuge. This is the first hammock ridge north of the inlet near Joe's Ridge Creek, but is south of the big landmark trees of Cherry Island. This rather low ridge runs from almost the edge of the Bay southeasterly for half a mile or more deep into the marsh. It is rather open compared with most other heronries allowing good visibility of the nests, which are mostly in small deciduous trees. Wop Island is well named, for there were indeed

about 45 pairs of Black-crowned Night Herons present and also a few Yellow-crowns, and they were certainly wopping away as I made my way through their nesting site. On the south side of this ridge is a small reed bed, one of the few areas on the island where Long-billed Marsh Wrens were encountered (Table 3).

Table 3. WOP ISLAND HERONRY, Smith Island, Md., June 4, 1973

Contents	Green Heron	Little Blue	Snowy Egret	La. Heron	Black- cr.Nt	Yellow- cr.Nt	Glossy Ibis	Total
1e	-	-	1	-	3	-	1	
2e	-	-	-	-	1	-	2	
3e	1	-	-	-	-	-	2	
1e,1y	-	-	1	-	-	-	-	
1y	-	1	-	2	1	-	1	
2y	-	6	1	6	8	-	1	
3y	-	4	2	7	2	1	-	
4y	-	-	-	1	-	-	-	
Total examined	1	11	5	16	15	1	7	56
Grand total	5	33	15	48	45	3	70	219

THE EWELL COLONY

In some respects the colony at Ewell was the most interesting one. It is located just across the main channel from the town on a high bank overgrown with extremely dense growths of honeysuckle, poison ivy, and medium-sized trees. So impenetrable was this undergrowth that frequently it was almost impossible to make headway through it. At times it was necessary to crawl through it semihorizontally, not at ground level but two or three feet high, half-suspended by vines and dead limbs! An advantage to this closed-in tangle together with camouflage colored clothing was a minimal disturbance of the birds. One is practically invisible. As a result, most of the nests seen had adult birds on them and consequently a greater percentage of the nests found were identified specifically. So close is this to the town that frequently the words of songs on the radio were discernible.

Of special interest here were the good numbers of Yellow-crowned Night Herons. They are the scarcest of the herons in most other areas of Delmarva, but here they were among the commonest. The totals of 84 and 50 counted on June 2 and 4, 1973, mostly in the Ewell area, are record counts for the state. An estimated 40 pairs nested at the Ewell colony. The contents of 15 of these nests were recorded. Yellow-crowns are probably commoner here than anywhere else in the state. This must be one of the best places for them on the Delmarva Peninsula, along with Tangier, Mockhorn, and Fisherman Islands, all in Virginia. The colony at Ewell was also interesting in that it was the only large mixed colony I visited that had no egrets at all. A complete survey of this place was hard to obtain because of the dense vegetation, so the numbers estimated may be quite low (Table 4).

Table 4. EWELL HERONRY, Smith Island, Md., June 2 & 4, 1973

Contents	Green Heron	Little Blue	La. Heron	Black- cr.Nt.	Yellow- cr.Nt.	Glossy Ibis	Total
2e	-	-	-	1	1	2	
3e	-	-	-	-	1	-	
4e	1	-	-	-	1	-	
5e	-	-	-	-	1	-	
1e,2y	-	-	-	-	1	-	
1e,3y	-	-	-	1	-	-	
1e,4y	-	-	-	-	1	-	
2e,2y	-	-	-	-	1	-	
3e,2y	-	-	-	-	1	-	
1y	1	1	3	-	-	2	
2y	1	1	2	-	1	1	
3y	-	1	2	1	2	1	
4y	-	-	1	1	4	-	
Total examined	3	3	8	4	15	6	39
Grand total	8	20	30	30	40	60	188

CHERRY ISLAND

Cherry Island is about one mile north of the Martin refuge tower. When following the channel in to the tower one passes tiny West Troy Island, where over one hundred pairs of Common Terns nest barely above sea level and extremely vulnerable to above-average tide. The huge deciduous trees of Cherry Island are easily visible as one leaves Ewell. Or, heading south from South Marsh Island across Kedges Strait by the offshore lighthouse at Solomons Lump, these trees may be the first sign of Smith Island from up the Bay, an indistinct, hazy blur in the blue-gray mirage at the horizon, a welcome landmark. They are sometimes visible all the way from the mainland at Deal Island.

From the refuge tower one gains a unique perspective of the complexity and vastness of the Smith Island marshland. The entire refuge is visible from here in this almost two dimensional substrate. The maze of channels, tidal guts, *Juncus roemerianus* marsh with patches of *Spartina patens*, hammocks with large trees, and open bay is an impressive sight. All around the refuge the Osprey nesting platforms are visible. One of the tidal guts, Joe's Ridge Creek, almost completely bisects the refuge from its entrance onto Tangier Sound to the southeast all the way up through several miles of the island to its northeast corner. But it is sealed off just at the Bay. Also visible from the tower are at least three additional well-forested hammocks which I did not visit, but which almost certainly support additional nesting herons. These are several miles southeast of the tower, but with a twenty-five power telescope it was easy to observe several big flocks of Glossy Ibis as they descended into one of them.

The tower at night presents a spectacle of a different kind. High up in the night air, the flapping flag pole rope the only unnatural sound, one is surrounded by miles of darkened, silent marshlands as the

winds rustle through the vast meadows of *Juncus*. Overhead the black sky is infinite. Far off in the distance glimmer the lights of Tangier Island, Crisfield, and Deal Island.

As recently as 1971, according to Bill Julian, the heronry at Cherry Island was enormous, consisting of thousands of birds. In that year the colony was intensively studied by U. S. Fish & Wildlife Service biologists. Transects were laid out and many young birds were banded; 211 pairs of Glossy Ibis were found to be nesting. But after 1971 the colony thinned out considerably, probably dispersing to other nearby hammocks. When I visited Cherry Island in June 1973, the only nesting species I found in my brief visit were a few Great Blue Herons, Common Egrets, and Glossy Ibis, although other species, most likely night herons, were possibly present.

KELLY ISLAND

Kelly Island is southeast of Ewell and northeast of Tylerton on a hammock south of Easter Point. Several attempts were made to approach it by boat up guts. Finally one led to within a few hundred yards of it, but striking across the *Juncus* marsh I found I had to cross a deep channel to gain access, wading up to my chest. After finally reaching my objective I was disgusted to find a big channel with a large crab boat in it whisking right past the heronry. Such is the confusion of the area's waterways to an outsider. But the effort was well worth it, as this was the only colony I visited where all ten of Maryland's nesting herons were breeders. In addition it was the largest Smith Island colony. A nearby hammock also had nesting herons, but was not visited. This locality was the only one on Smith Island where Common Crow and Marsh Hawk were seen. Kelly Island has a fine growth of large deciduous trees including a large fig. Parts of it are quite open and it may formerly have been inhabited. Little Blue Herons seemed to predominate here. Many of these as well as the young of other species were already out of the nest on the early date of June 4, 1973 (Table 5).

Table 5. KELLY ISLAND HERONRY, Smith Island, Md., June 4, 1973

Contents	Great Blue	Green Heron	Littl Blue	Cattl Egret	Com. Egret	Snowy Egret	La. Heron	Black cr.Nt	Yello cr.Nt	Glossy Ibis	Total
1e	-	-	-	-	-	-	-	-	1	-	-
3e	-	-	1	1	-	-	-	-	-	1	-
1e,2y	-	-	1	-	-	-	-	-	-	-	-
2e,1y	-	-	1	1	-	-	-	-	-	-	-
3e,2y	-	-	-	-	-	-	-	-	1	-	-
1y	-	-	1	-	-	-	1	-	-	-	-
2y	-	-	10	6	1	7	5	4	1	-	-
3y	1	-	12	2	1	10	1	3	1	-	-
4y	-	-	2	-	-	-	-	-	-	-	-
5y	-	-	-	-	-	-	-	1	-	-	-
Total examined	1	-	28	10	2	17	7	8	4	1	78
Grand total	5	5	70	40	10	50	30	25	15	35	285

Gulls

The largest Herring Gull colony in Maryland, and possibly south of New York, is located at Easter Point, about two miles southeast of Ewell, and off of the refuge on Smith Island. The site is an old spoil bank, much of which is quite high by local standards, that is, six or more feet above sea level. Here there are big open areas of bare ground surrounded by dense phragmites beds that grade into *Spartina patens* in the higher marsh. The phragmites are a good place in which to stay concealed. After a few minutes the huge wheeling flock of hundreds of calling Herring Gulls, several hundred feet up, begins to settle back onto its eggs. On June 2, 1973, at least half a dozen adult Great Black-backed Gulls were in this area. There is a good possibility that a few pairs of them also nest out here, but on June 2, in spite of several searches of incubating gulls, no nests were found. On this date the little gull chicks were just starting to hatch. The contents of 543 nests were recorded shortly before sunset as follows: 1e, 77; 2e, 121; 3e, 294; 1e, 1y, 4; 2e, 1y, 10; 1e, 2y, 15; 1y, 5; 2y, 9; 3y, 8. Undoubtedly many nests were missed, but most appeared to be on the exposed earth where they were easy to find; it is doubtful whether more than 100 were unrecorded. According to local residents the gull colony has existed for a long time, and probably considerably predates the first official state breeding record at Sharp's Island, Talbot County (Kleen, 1956). But these islands have been almost completely neglected by birders. They represent, along with pelagic areas, one of the last ornithological frontiers of the state. They deserve closer scrutiny, but their historical neglect is one of the features that makes them so intriguing. Sharp's Island, long a gunnery target and former site of colonies of gulls and terns, used to be inhabited, but erosion destroyed it. It completely disappeared about fifteen years ago. Many other Eastern Shore islands are gradually washing away, which is another good reason for investigating them before it is too late.

Up at least until 1954 Laughing Gulls also nested at Sharp's Island (Stewart & Robbins, 1958). These gulls are common all over the lower Eastern Shore from late April through October. On twelve May bird counts in southern Dorchester County their numbers have exceeded 200 four times and 100 four times. Just where these birds breed is a mystery. Since Sharp's Island vanished they have not been found breeding anywhere on the Bay. Yet it is hard to believe that they are all either non-breeders or wanderers from coastal colonies. Perhaps there is a colony on some unvisited section of one of the larger islands in the Bay. I asked several Smith Islanders if they knew where this might be, but to no avail. Locally laughers are called soft crab or cackling gulls.

THE INLET

The inlet from Chesapeake Bay in toward Ewell on the western side of Smith Island is flanked by two long jetties constructed of large rock sections. Superficially this would seem to be a good prospective site for the usual syndrome of jetty birds, such as sea ducks, Purple

Sandpipers, and the scarcer gulls. Perhaps this is so. It remains to be discovered, and the opportunity is there for some enterprising birder who has the ambition to come out here in the winter. A boat will be necessary. However, the rocks are in very shallow water. The aura which ocean jetties have, with their rich algal growths and deep ocean water, is definitely lacking here. Nevertheless this area deserves some attention.

Inside of the inlet good flats are exposed at low tide, which even in early June attracted several species of shorebirds, notably American Oystercatchers, Black-bellied Plovers, Knot, Dunlin, and Semipalmated Sandpipers. This habitat seems to have much promise.

DEAL ISLAND AND LITTLE DEAL ISLAND

Leaving the Smith Island area behind, as one proceeds up the Bay, temporarily bypassing South Marsh Island, the Deal Island area soon comes into sight to the northeast. Both Deal Island and Little Deal Island have previously been described (Armistead, 1970, 1971). The Deal Island heronry consists entirely of Great Blue Herons. It is located within the large diked impoundment and is best seen from the dirt road that forms the extreme west side of this dike. This road is reached by turning left (south) off Route 363 opposite the easternmost service station at Dames Quarter. The colony is visible from a distance of even four or five miles because the nests are high up in large dead trees. The colony did not exist in 1970 or 1971. Brooding adults and young birds are easily seen from the dike road at a distance of well under a mile. However, when I tried counting the nests in late May and July 1973, I arrived at different totals each time I counted, indicating the difficulty of getting truly accurate counts in some heronries. Thirty-three nests were seen well enough to ascertain their contents: 1y, 6; 2y, 10; 3y, 14; 4y, 3. The estimate of 70 breeding pairs is probably a maximum.

Suffice it to say that the entire dike area is large, perhaps eight or nine miles around, making it comparable in size to the combined east and west impoundments of Brigantine. Most of it must be walked, however. Gadwalls nest rather commonly here. The middle of a closed off section along the southeast corner passes within about half a mile of a mixed Common Tern-Forster's Tern colony offshore on a small island in the Manokin River. At low tide one can wade out to this island. In 1973 the impoundment was rather drastically drained making it temporarily very attractive to herons and shorebirds. However, another result was that Pied-billed Grebes, Common Gallinules, and American Coots became very scarce. Formerly this impoundment supported what was probably the largest breeding population of each in Maryland, with hundreds of gallinules and coots and scores of grebes.

Farther down the Deal Island road (Route 363) at its end in the small fishing village of Wenona, one can look across a narrow inlet to Little Deal Island. Here a heronry was discovered in 1971. It was not revisited until July 7, 1973, when Sam Payne, Bessie Piver, Margaret

Sickles, and the writer went there. An estimated 200 pairs of herons were nesting, with all species present except Great Blue Heron and Cattle Egret. These two species had been there in 1971. The colony seemed to have somewhat fewer total nests than previously. However, at all the heronries visited in 1973 during July much of the breeding activity had already finished. Many young birds were already out of their nests by then or on the verge of leaving them (Table 6).

Table 6. LITTLE DEAL ISLAND HERONRY, Somerset Co., Md., July 7, 1973

Contents	Green Heron	Little Blue	Common Egret	Snowy Egret	La. Heron	Black cr.Nt	Yellow cr.Nt	Glossy Ibis	Total
3e	-	-	-	-	-	-	-	1	
1y	-	-	1	1	-	2	-	1	
2y	-	-	3	9	1	2	1	2	
3y	-	1	1	6	1	-	1	-	
Total examined	0	1	5	16	2	4	2	4	34
Grand total	5	25	15	80	20	20	5	30	200

A mile or so southeast of Little Deal Island is Piney Island, not much more than an acre or so, consisting of only marsh grass and a few bushes. From the end of the west dike road of Deal Island Wildlife Management Area, Piney Island is visible way out in the Manokin River. Through a 25X 'scope the cloud of Common Terns is barely discernible as an indistinct white shimmer as they hover over their nests. On July 7, 1973, Bessie Piver, Margaret Sickles, and I found 68 nests with eggs on this little island tern colony out in the middle of nowhere.

SOUTH MARSH ISLAND

By heading onto the Bay again to the south and west of Deal Island, one finds low-lying South Marsh Island. This is directly north of the Martin refuge and northern Smith Island across lonely Kedges Strait. In the midst of the Chesapeake marsh islands as it is, with uninhabited Bloodsworth Island just to the north, this area has a real wilderness feeling to it. There are fewer than ten large deciduous trees on South Marsh Island. The hunting lodge, perched precariously on a tiny island on the northeast side, is a landmark from miles away. It detracts little from the island's wild quality. Here Barn Swallows nest under the eaves, and on June 1, 1973, there was an Osprey nest on the roof of one of the transportable blinds clustered around the main building. Just north of there, on top of the roots of a huge drift log, is another Osprey nest on the extreme northeast island tip. A maze of channels and guts cuts through South Marsh Island. I tried to follow the main one as shown on the map (Maryland. Dept. of Chesapeake Bay Affairs, 1969), through the island to the Bay proper, but became hopelessly lost. Each new bend revealed, as droves of diamondback terrapins slid off the banks into the brackish water, a bewildering choice of branching creeks. Fortunately I was able to retrace my path, which led back past the only cluster of trees on the island; in the largest was an active Osprey nest. There were eight Osprey nests, all active, on the east side of the island. Because of the lack of higher vegetation, no heronry was found on

South Marsh Island. However, all the species of herons were seen here, except, unrealistically, Green Heron. In addition, the following species were seen, all of which probably nest there: Black Duck, Willet, Common Tern, Fish Crow, Long-billed Marsh Wren, Red-winged Blackbird, Boat-tailed Grackle, Seaside Sparrow, and Song Sparrow.

An Osprey nest platform program on South Marsh Island would undoubtedly have favorable results. Bloodworth Island would be another good locality for this, for although there are numerous natural sites there, in addition to the low shore blinds, most of the trees are dead and in the process of deterioration. Perhaps poles could even be erected which would be attractive to and sustain the Great Blue heronry. Both the private owners of South Marsh Island and the U. S. Navy at Bloodworth might very well be amenable to the erection of such platforms. However, this is all very hypothetical. Together with the Martin refuge, these two islands form an unparalleled, uninhabited string of marsh islands unique on the east coast. The west or Bay side of South Marsh Island I have not investigated. Through the scope this appears identical to the rest of the island-extensive *Juncus-Spartina* marsh, with the higher areas occupied by *Baccharis*. At the least, the smaller islands should be looked over for tern colonies, and for good flats or bars for roosting shorebirds, gulls, and terns.

HOLLAND ISLAND

Holland Island has been previously described (Armistead, 1972). At that time, however, only a cursory visit was made to the heronry. On July 5, 1973, all of the species found in 1972 were still active breeders with the addition of Green Heron and Yellow-crowned Night Heron. Thus all the herons except Cattle Egret were there. The Yellow-crowns were seen in some numbers with at least 25 present, plus 5 more at nearby Adam Island, nearly quadrupling the previous Dorchester County high count. The total of 200 estimated nests is about double the 1972 estimate. However, it is a crude estimate because the vegetation is extremely dense owing to a thick growth of vines. There are nests all over the island, especially of the larger species, but only the north end was worked, as in 1972. Hence the total nests actually there may be even higher (Table 7).

Table 7. HOLLAND ISLAND HERONRY, Dorchester Co., Md., July 5, 1973

<u>Contents</u>	<u>Great Blue</u>	<u>Green Heron</u>	<u>Littl Blue</u>	<u>Com. Egret</u>	<u>Snowy Egret</u>	<u>La. Heron</u>	<u>Black cr.Nt</u>	<u>Yello cr.Nt</u>	<u>Glossy Ibis</u>	<u>Total</u>
3e	-	-	-	-	-	-	-	-	1	
1y	2	-	-	-	-	-	1	2	-	
2y	1	-	6	2	1	1	2	-	1	
3y	1	1	4	1	-	1	1	3	-	
4y	1	-	-	-	-	-	-	1	-	
Total exam.	5	1	10	3	1	2	4	6	2	34
Grand total	25	5	70	15	20	5	15	20	25	200

Erosion had so altered the west side of the island in just over a year that some of the portions of the heronry visited in 1972 were not recognizable. Remains of an old graveyard still persist under the tall trees where the Great Blue Herons, Common Egrets, and the two night herons nest. The large deciduous trees of Holland Island make an impressive silhouette from the mainland side of the island. They seem to rise right up out of the water when seen from a distance of several miles, like a blue-gray apparition of higher land out in the middle of the Bay, for this is the outermost of the islands in southern Maryland. And like the rest of them it has been gradually eroding, and is doomed to vanish. In addition the trend, as it is for the rest of the east coast, indicates a rising sea level. The number of Osprey nests on Bloodworth Island and its satellites (Northeast, Spring, Pone, Holland, and Adam Islands) was unchanged from 1972.

ADAM ISLAND

This locality has also been described previously (Armistead, 1972). Adam Island is not the site of a heronry in the usual sense of the word. Instead, there are a few scattered heron nests all over the island. The same number of Great Blue Heron nests were here in 1973 as in 1972. In 1972 up to seven Yellow-crowned Night Herons were seen but no nests found. In 1973, with only a few minutes of searching, two nests were located right next to the Navy tower at the northeast end of the island. One had three eggs, on July 5, but the second one was about twenty feet up in a very bristly holly and was not investigated. Adults flushed from both nests. The central core of the island has a very dense poison ivy and red cedar growth, but the Great Blue Heron and Osprey nests are easily visible in the larger trees. In the undergrowth here there are undoubtedly other night heron nests and perhaps the nests of other species as well. An American Oystercatcher on the north end was the second Dorchester County record, following their observation on three days in May 1972.

BLOODSWORTH ISLAND

The numbers and disposition of herons here remained essentially unchanged since 1972 (cf. Armistead, 1972), when about 180 active Great Blue Heron nests were located; 180 was the estimate for 1973 also. Most of these nests were again along Fin Creek Ridge where they are quite easy to count in the long row of dead pines. However, there are Great Blue Heron, Green Heron, and Common Egret nests almost anywhere on the island where there are clumps of red cedars. Several of these little subcolonies were visited for the first time in 1973. Both night herons have been present on all my trips to Bloodsworth. The Yellow-crowned nest with 5 eggs found by Gordon Chaplin and me on May 19, 1973, established a new Dorchester County breeding record. An adult flushed right off of the nest, which was situated 6 feet high in a 10 foot *Baccharis halimifolia* in the midst of the Great Blue heronry on Fin Creek Ridge. Later that summer Yellow-crown nests were found elsewhere in the county at Adam Island (2 nests) and Holland Island (6 nests) as already described. The Great Blue Heron colony here is one of the state's

biggest, but not as large as the well-known one at Poplar Island, in Talbot County (Table 8).

Table 8. BLOODSWORTH ISLAND HERONRY, Dorchester Co., Md., July 5, 1973

<u>Contents</u>	<u>Great Blue</u>	<u>Green Heron</u>	<u>Common Egret</u>	<u>Black- cr.Nt</u>	<u>Yellow- cr.Nt</u>	<u>Total</u>
4e	-	1	-	-	-	
5e	-	-	-	-	1(5/19/73)	
1y	7	-	2	1	-	
2y	9	1	4	-	-	
3y	5	1	3	-	-	
4y	3	-	-	-	-	
Total examined	24	3	9	1	1	38
Grand total	180	20	30	5	3	238*

*Snowy Egrets also nest here, but were observed only from a great distance.

It is too bad that most of the nests are in dead loblolly pines that have lost most of their supporting branches and will continue to deteriorate each year. Many older nests have fallen out of the trees. Some of them have fallen to the ground practically intact. On May 19, 1973, when Gordon and Holly Chaplin, Liz Armistead, and I were on Bloodsworth, Naval ships shelled the island all day long. The incoming shells exploded about one-and-a-half miles west of us, sending showers of mud in the air a hundred feet or more. Strangely enough the explosions seemed to disturb the birds hardly at all and certainly less than our presence there in the midst of the colony. On July 5, 1973, I flushed two large buck deer out of one of the higher areas where there was a dense growth of *Baccharis*. Deer are common out here. Their trails make good walkways through the dense undergrowth as well as in the *Juncus* grass in the marsh. Exploration by foot of this area is not to be encouraged, however, because of its long history as a bombing range. Watermen sometimes catch occasional old bombs in their nets! Another surprise on July 5 was a small juvenile Sharp-tailed Sparrow being fed by an adult. These marsh sparrows are quite uncommon on most of the lower Eastern Shore in Maryland. They are far outnumbered by Seaside Sparrows.

BARREN ISLAND

Barren Island is a two-mile long, crescent-shaped island easily visible from the west side of Hooper Island in southern Dorchester County. It has enormous, dense, and nearly pure loblolly pine stands on its central part. Overlooking the Bay is a large hunt club. The northern tip juts into Tar Bay, an extremely shallow area favored by herons and shorebirds at low water and site of the tortuous channel into the town of Honga, which cuts through Hooper Island into the Honga River. Tar Bay has seen in previous years small numbers of nesting Least and Common Terns.

The lower Honga River is one of the best places in Maryland for concentrations of Redheads in winter. The upper part is especially favored by blind-nesting Barn Owls. The northern tip of Barren Island is a minor roosting place for gulls and terns, but the southern tip is a really good place. On occasion over 1100 Laughing Gulls and 500 Herring Gulls rest here, best seen in the glimmering distance through a telescope from in front of the general store at the town of Fishing Creek, unless you can get to Barren Island in a boat. The pilings and fishing weirs south of Barren Island attract groups of Double-crested Cormorants, sometimes over one hundred, barely discernible far out in the Bay. From the same store small numbers of Brant, formerly much commoner on the Bay, are sometimes seen.

From there also, in May 1972, I first noticed heron colonies on the south central portion of Barren Island. The masses of white herons show up fairly well even at a distance of over a mile. The three subcolonies are nearly contiguous, each in (or mostly under) a small grove of mature loblollies separated by sections of *Spartina patens* marsh. Great Blue Herons, Common Egrets, and Black-crowned Night Herons nest in the tops of the big pines. But most of the herons nest below in the shrubby growth: honeysuckle, wax myrtle, small deciduous trees, etc. All Maryland species breed here except Yellow-crowned Night Heron. Only one Louisiana Heron nest was found. This species is a scarce breeder north of Smith Island. Each of the subcolonies is quite open, allowing easy walking and an almost exact nest count. The total of 1013 nests is probably accurate to within one percent. Of course the species breakdown is mostly estimated owing to the very similar appearance of many species' nests and eggs. However, this part of the island is also very narrow and subject to erosion, especially on the Bay side, where most of the trees are. Consequently its days are numbered. The colony may vanish or relocate just as rapidly as it came into existence (Table 9).

At the moment this may be the largest heronry as well as the northernmost truly heterogeneous one on the Chesapeake Bay. Willets, Fish Crows, and Black Ducks also nest on Barren Island. On the southern tip a Fish Crow nest was about twelve feet up in a dense thorn tree. So bristling with thorns was this tree that climbing it was completely out of the question. Fortunately by laying two long timbers at an angle of forty-five degrees it was possible to creep up these without being lacerated high enough to glimpse the one naked, blind fledgling while overhead the adults wheeled several hundred feet high in raucous protest. Directly below this nest in the same tree, and seemingly completely vulnerable, was a Green Heron nest with three eggs!

The estimated 449 Cattle Egret nests here were not only a new Dorchester County breeding record, but possibly the largest single species nest total for any heron in the Bay. Jan Reese (pers. comm.) informs me that in recent years the heronry at Long Marsh Island in Queen Annes County was also dominated by Cattle Egrets, with perhaps 125 pairs. This colony also has had breeding Snowy Egrets, Green Herons, and small numbers of Glossy Ibis and Louisiana Herons. Perhaps this is the northernmost breeding locality for the latter two species on the Chesapeake.

Jan Reese also described another heronry on Bodkin Island, also in Queen Annes County, which several years ago had nesting Great Blue Herons, Common Egrets, and Snowy Egrets. Bodkin Island is about one mile east of Long Marsh Island. It has now been bulkheaded and the trees have been cut, rendering it useless for herons. Jan further describes a third heronry farther up the Bay at Hail Point near Eastern Neck National Wildlife Refuge in Kent County. This consists of an estimated 50 to 60 pairs of Great Blue Herons. But to return to Cattle Egrets, the only other heronry where I found them breeding was at Kelly Island on Smith Island. When they are present they seem to be very common breeders, but there do not seem to be very many places where they colonize.

Table 9. BARREN ISLAND HERONRIES, Dorchester Co., Md., June 19, 1973

Contents	Great Blue	Green Heron	Littl Blue	Cattl Egret	Com. Egret	Snowy Egret	La. Heron	Black cr.Nt	Glossy Ibis	Total
1e	-	-	-	1	-	-	-	-	-	-
2e	-	-	-	10	-	-	-	-	1	-
3e	-	1	-	11	-	-	-	-	2	-
4e	-	1	-	2	-	-	-	-	-	-
1e,1y	-	-	-	1	-	-	-	-	-	-
2e,1y	-	-	-	1	-	-	-	-	-	-
1e,2y	-	-	-	-	-	-	-	-	1	-
1y	-	-	-	1	1	-	-	7	1	-
2y	3	-	-	10	10	10	-	8	8	-
3y	4	-	3	5	5	5	-	1	3	-
4y	-	-	-	-	1	-	1	-	-	-
Total exam.	8	2	3	42	17	15	1	16	16	120
Grand total	55	5	75	449	77	155	1	31	165	1013*
So. colony	15	1	20	74	2	40	1	6	25	184*
Mid. colony	30	3	25	280	25	75	-	15	100	553
No. colony	10	1	30	95	50	40	-	10	40	276

*Includes 1 Green Heron nest away from colonies.

When Barren Island was first visited on May 20, 1973, several herons were seen both coming to the heronry from the Western Shore and leaving it and flying across the Bay to the Western Shore. Likewise, from Cove Point, a few herons were seen heading east across the Bay toward the direction of Barren Island on May 21 and 22. Also at Barren Island on May 20 were three small juvenile Boat-tailed Grackles near their northern breeding limit on the Chesapeake.

BUGS

Anyone who has had the pleasure of investigating heronries and islands in the summer knows that insects can be a very serious problem. At times flies can become frightening, especially later in the summer. To emerge from a thicket with a cloud of hundreds of flies swarming within a few inches of one's head and getting into the hair on a

breathless day when the temperature is in the high eighties is an experience of unparalleled unpleasantness. It is a good idea to literally cover your body upon entering a hammock under these conditions. Wear knee boots with long trousers. I prefer my trousers hanging down over the outside of the knee boots. This keeps out not only the bugs but also twigs and seeds. Long-sleeved shirts with a T-shirt underneath are *de rigueur*, as are also gloves. This "heronry costume" is very hot, but in my experience it is far better to be hot than to have body contact with myriads of insects. If you deliberately take your time the heat is not a problem. Salt pills and plenty of water are a good idea.

To protect one's face a variety of masks are effective. Loose, olive-drab, mesh masks are available in many Army-Navy stores. These have draw-strings and can be pulled tight around the lower neck. They can also be stuffed into one's pocket when not needed. But the mesh tends to flatten against the face, and they are very hot. Bill Julian recommends the use of a pith helmet with a bee veil. The veil slips around the crown of the helmet and the wide rim holds the veil out from your face, so that breathing is easier and somewhat cooler. But this system is bulkier and makes going through dense undergrowth harder. Such veils and helmets are available from Dadant (cf. Dadant & Sons, Inc., 1973). These supplies are also probably available from James M. Marsh, Old Line Apiary, 4009 Beechwood Road, Hyattsville, Maryland 20782.

I encountered no stinging insects, ticks, or chiggers in any of the heronries or on any of the islands I visited, but they may be present. Poison ivy is rank on the higher parts of many islands, but by dressing defensively as described above I avoided getting it. Mosquitoes I found to be much less of a problem than the fly swarms. Mosquitoes bite easily through just one shirt, which is why I recommended wearing a T-shirt underneath a long-sleeved shirt. Ordinary house fly type flies can be very noxious, especially when riding in a boat. They relish bare flesh, especially when it is wet. Fly swatters should be on every boat. But worst of all are the visible clouds of very tiny insects (midges or gnats?) which rise from the marsh sometimes on windless days in huge swarms. These get on your arms and head by the hundreds and literally drive you crazy as they creep and bustle around on your skin. The source of a thousand itches, the skin crawls. They were so bad I was driven off Adam Island once in May 1972. The only relief was to get in the boat and leave at high speed, standing up so that the wind would blow them off! Such are the delights of these islands. But generally speaking the insect horrors of the Eastern Shore are greatly exaggerated. On most days one is hardly aware of them.

ACKNOWLEDGMENTS

William H. Julian, manager of Blackwater National Wildlife Refuge, was very helpful in arranging access to sections of Martin National Wildlife Refuge and was always generous with helpful advice. Stanley Marshall, of Ewell, Md., and the Martin refuge, supplied me with much useful information and guidance for the Smith Island area. Jan G. Reese, of St. Michaels, Md., shared with me his knowledge of heronries

in Talbot, Queen Annes, and Kent Counties. Likewise, Fred R. Scott, of Richmond, Va., gave details concerning the nesting of these birds on the Virginia part of Chesapeake Bay. I extend my appreciation to them all.

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FIRST YEAR OF BREEDING BIRD ATLAS, HOWARD COUNTY, MARYLAND

M. Kathleen Klimkiewicz and Joanne K. Solem

INTRODUCTION

The Howard County Breeding Bird Atlas was initiated in 1973 as a second pilot study for Maryland. The project has four objectives:

1. to test a smaller grid system than was used in Montgomery County;

2. to field test breeding bird survey mini-routes to ascertain their potential as a useful atlas method;
3. to see if workshops increase observer efficiency;
4. to ascertain if the above procedures will allow completion of a county atlas project in two years.

Howard County, occupying an area of 251 square miles, lies on the Piedmont Plateau, northeast of Montgomery County between Baltimore and Washington, D.C. Howard lies almost exactly in the center of Maryland and is next to the smallest county in the state. The county is bounded by the Patapsco River on the northeast and the Patuxent River on the southwest. There are two reservoirs--Triadelphia and Rocky Gorge.

Howard is a rapidly growing county with a 1970 population of 61,181 or 244 people per square mile (ranking 10 out of 23 counties). There was a 69% population increase from 1960 to 1970. The model city of Columbia is responsible for a large percentage of this growth. There is only one other city in the county--Ellicott City--which also has shown rapid growth. Approximately 70-75% of the county is undeveloped or agricultural land.

PROCEDURES AND REPORTS

The procedures, reports, and materials used were the same as those described for the Montgomery County Atlas by Klimkiewicz and Buckler (1971) and Klimkiewicz (1972) with the following exceptions.

THE GRID -- The 5-km grid used for Montgomery County was sub-divided into a 2 1/2-km grid for Howard County. In order to maintain the integrity of the grid only complete 5-km blocks (four 2 1/2-km sub-blocks) were covered, even if only part of the block was within the county. The smaller grid was used because many of the species that are found in all or nearly all blocks are not uniformly distributed over the whole county, but are actually restricted to specific habitats such as woodland along the major streams. Changes in breeding bird distribution over a period of 10, 50, or 100 years can certainly be demonstrated most dramatically by using the smallest grid that is feasible--since the finer the grid the more specific the distribution pattern. Examples of species restricted to specific habitats are the Red-shouldered Hawk (*Buteo lineatus*)--floodplain forests, La. Waterthrush (*Seiurus motacilla*)--wooded streams, Pileated Woodpecker (*Dryocopus pileatus*)--extensive stands of mature woodland, and Cliff Swallow (*Petrochelidon pyrrhonota*)--bridges across streams, rivers or reservoirs. Illustrative material for the Cliff Swallow and Pileated Woodpecker was given by Klimkiewicz (1972).

Each 5-km block was sub-divided into quarters numbered 1, 2, 3, and 4, and the highest category of breeding evidence for the block was assigned to each quarter of the block in which the species was observed. Thus a single confirmation suffices for the entire block; yet the species is mapped for only those quarters of the block where it had actually been detected during the breeding season.

THE MINI-ROUTES -- The distribution of all but the rarer and very local species can be mapped in much greater detail by a concentrated application of the Breeding Bird Survey method, which provides quantitative results in addition to breeding status for most species. The mini-routes, one-half as long as regular BBS routes, consisted of 25 stops at one-half mile intervals. The observer records every bird seen or heard during three minutes at each stop and then immediately moves to the next stop. Any species seen between stops (if not recorded at the stop) is recorded separately as is any breeding evidence observed.

Each route was run twice, once forward, once backward. Many common species immediately become classified as probable nesters by being recorded singing at the same stop on two days. The results of the 23 mini-routes were sent to the observers and much of the atlas effort was then concentrated on finding and confirming the rarer and local species.

THE WORKSHOPS AND HANDOUTS -- Four atlas workshops were provided for all observers--one on general techniques to aid the observers as suggested by Klimkiewicz (1972) and three on identification, finding, and confirming the more difficult species, such as hawks, owls, flycatchers, and warblers. Several additional information sheets were provided--workshop summaries, arrival-departure safe dates for all expected species (to eliminate the reporting of migrants), and a list of difficult species and their habitat preferences.

REPORTS -- Two reports were requested--preliminary on or before June 25 and final on or before Sept. 10. Again the Cornell nest cards were optional but encouraged. Close coordination and communication was maintained throughout the entire breeding season.

RESULTS AND DISCUSSION

All results are preliminary (one year only). One hundred and twenty-one species were recorded (97 confirmed, 14 probable, 10 possible). This compares exceptionally well with Montgomery County (almost double the size of Howard) which had 119 species (88 confirmed, 14 probable, 17 possible) the first year.

Observers recorded an average of 68 species per block (as compared with 60 in Montgomery) and confirmed an average of 35% per block (33% in Montgomery). Seventy-eight of the confirmed species (80%) were confirmed on active nests. New breeding species for Howard County include--Black-crowned Night Heron, Least Flycatcher, and Prothonotary Warbler. In addition the following results are of interest.

POSSIBLE BREEDERS -- Definite evidence of breeding for the LEAST BITTERN (*Ixobrychus exilis*) in the interior regions of Maryland is lacking except for Prince Georges (Stewart and Robbins, 1958) and Montgomery Counties. A bird was observed in one sub-block in the Relay quadrangle along the Patapsco River. BLUE-WINGED TEAL (*Anas discors*) have been released on a game farm in the Clarksville quadrangle (two sub-blocks). Since these birds are free-flying and have been confirmed for Montgomery

County, this species is a possible nester. RUFFED GROUSE (*Bonasa umbellus*) have also been released on the same game farm and were observed in one sub-block. This species also was confirmed in Montgomery County.

Two quadrangles--Relay and Woodbine--had a total of 3 sub-blocks with VIRGINIA RAIL (*Rallus limicola*) in small marshy areas. This species is rare in the Piedmont; however, it was confirmed in Montgomery County last year. A single MONK PARAKEET (*Myiopsitta monachus*) was seen in the Sykesville quadrangle. Also a single SHORT-EARED OWL (*Asio flammeus*) was observed in one sub-block of Savage. "Short-ears" have nested recently in Montgomery County (Poolesville area) and in Virginia (*pers. comm.*, Wm. Clark).

TREE SWALLOWS (*Iridoprocne bicolor*) appeared in 4 sub-blocks in 2 quads--Woodbine and Relay. Single BROWN CREEPERS (*Certhia familiaris*) were recorded for Sykesville and Relay. One observation for the rare SUMMER Tanager (*Piranga rubra*) was recorded for Relay. Once more numerous, HENSLOW'S SPARROW (*Passerherbulus henslowii*) is now rare in the Piedmont (Stewart and Robbins, 1958); two were recorded--one for Woodbine and another for Relay. SWAMP SPARROWS (*Melospiza georgiana*) were recorded in Relay.

PROBABLE BREEDERS -- BLACK DUCKS (*Anas rubripes*) were probable in 2 out of 7 sub-blocks. According to Stewart and Robbins (1958), this is a rare species in all interior sections. TURKEYS (*Meleagris gallopavo*) were on territory in one sub-block in Clarksville (again in the vicinity of the game farm). Twelve sub-blocks in 9 quads had VEERIES (*Hylocichla fuscescens*) in residence. This species has been found to be quite widespread in both Montgomery and Howard Counties. Observers located the uncommon WARBLING VIREO (*Vireo gilvus*) in 9 sub-blocks (1 each in 9 quads)(Fig. 1).

The YELLOW-THROATED WARBLER (*Dendroica dominica*) has been recorded only as far north in Maryland as the Potomac River drainage in Montgomery County. Two blocks (one sub-block in each)--Savage and Sykesville--recorded this rare species (Fig. 2). It seems that this species is expanding northward along the major river drainages. The CHESTNUT-SIDED WARBLER (*Dendroica pennsylvanica*) recorded in Woodbine was a male on territory and was present for several weeks in June. Finally, the SAVANNAH SPARROW (*Passerculus sandwichensis*) is uncommon to rare in the Piedmont section (Stewart and Robbins, 1958). Woodbine, Sykesville, and Savage has 7 sub-blocks with Savannah Sparrows (at least one on territory).

CONFIRMED BREEDERS -- BLACK-CROWNED NIGHT HERON (*Nycticorax nycticorax*) had not previously been reported nesting in Howard County (Stewart and Robbins, 1958). Adults and fledglings were observed in 3 sub-blocks of Relay along the Patapsco River. BLACK VULTURE (*Coragyps atratus*), an uncommon nester in the southern Piedmont, was found in 12 sub-blocks (Woodbine, Sandy Spring, Sykesville, Savage, and Clarksville). This species was confirmed by finding a nest with eggs! COOPER'S HAWK (*Accipiter cooperii*) was recorded in only 3 sub-blocks (Woodbine and Clarksville). Unfortunately the only nest was abandoned (*pers. comm.*,

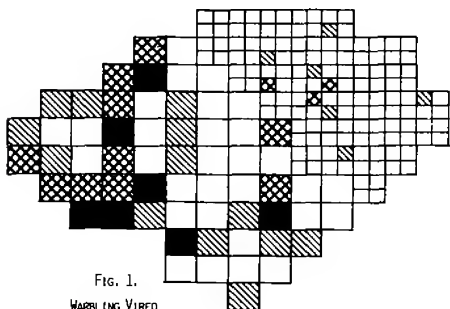


FIG. 1.
WARBLING VIREO

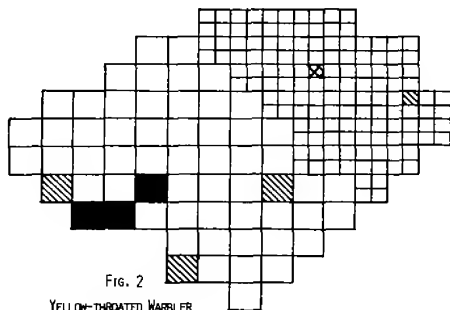


FIG. 2
YELLOW-THROATED WARBLER

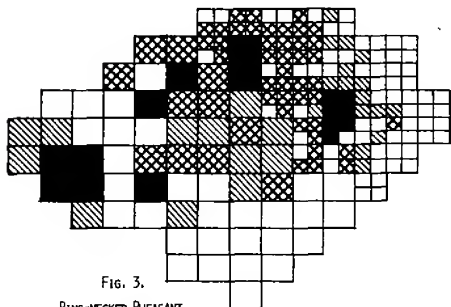


FIG. 3.
RING-NECKED PHEASANT

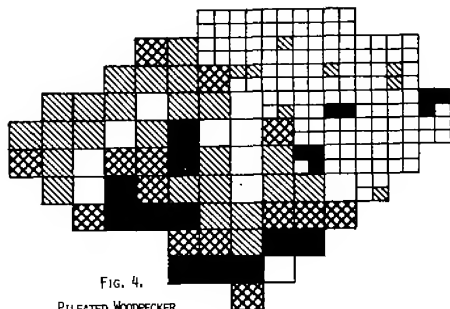


FIG. 4.
PILEATED WOODPECKER

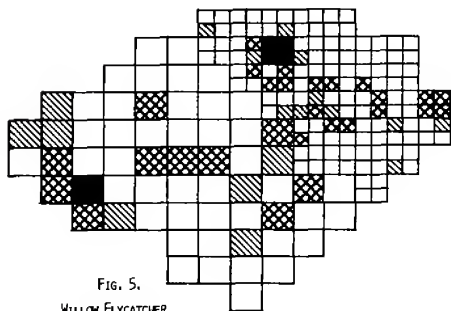


FIG. 5.
WILLOW FLYCATCHER

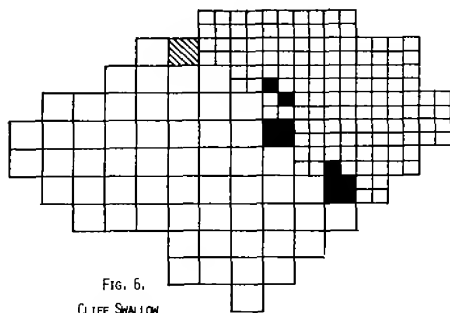


FIG. 6.
CLIFF SWALLOW

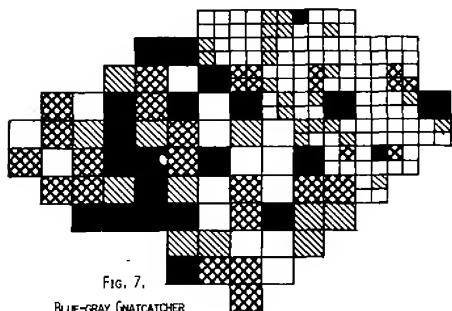


FIG. 7.
BLUE-GRAY GNATCATCHER

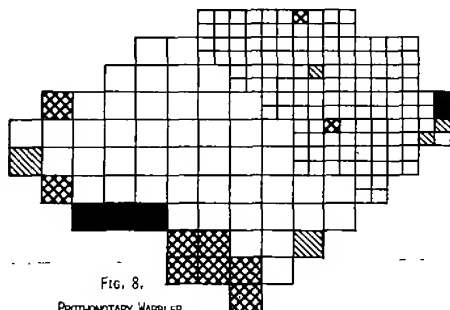


FIG. 8.
PROTHONOTARY WARBLER

J. Ruos). Introduction of RING-NECKED PHEASANT (*Phasianus colchicus*) appears to have been quite successful in the western two-thirds of Howard County (Fig. 3) where this species is quite common. SPOTTED SANDPIPERS (*Actitis macularia*) were found only in one block (all sub-blocks)--Relay. Again the habitat was the area along the Patapsco River.

BARN OWLS (*Tyto alba*) have nested in Oakland Mills Shopping Center, Columbia, Md. for several years (Savage quad). Two other blocks reported this species--Woodbine (2 sub-blocks) and Clarksville (4 sub-blocks). PILEATED WOODPECKERS (*Dryocopus pileatus*) were recorded in only 16 sub-blocks (Fig. 4) in 7 quads (Woodbine, Sykesville, Ellicott City, Sandy Spring, Clarksville, Relay, and Laurel). This species is restricted to extensive areas of upland moist forest and floodplain or swamp forest. Both habitat types are much restricted in the county. RED-HEADED WOODPECKER (*Melanerpes erythrocephalus*) was observed in 5 sub-blocks of 3 quads (Clarksville, Sykesville, and Relay).

WILLOW FLYCATCHERS (*Empidonax traillii*) were very widespread--33 sub-blocks (Fig. 5). LEAST FLYCATCHER (*Empidonax minimus*) was confirmed after being heard on a mini-route stop. Several observers watched as the female built the nest and the male sang continuously nearby. Two blocks (6 sub-blocks)--Woodbine and Relay--had BANK SWALLOWS (*Riparia riparia*) and three blocks--Woodbine, Sandy Spring, Clarksville (Fig. 6)--reported CLIFF SWALLOWS (*Petrochelidon pyrrhonota*). BLUE-GRAY GNATCATCHERS (*Poliophtila caerulea*) are uncommon in the Piedmont (except the Potomac River Valley); although, not restricted to wet areas, the species is distributed along rivers and streams (Fig. 7).

THE PROTHONOTARY WARBLER (*Protonotaria citrea*), a new breeding species for Howard County, is concentrated in the Patapsco drainage (Sykesville and Relay) with one record from the Patuxent (Clarksville). This species was observed in 7 sub-blocks,--possible breeder in 3, probable in 2, and confirmed in 2 (Fig. 8). A rare breeder in Montgomery County, the WORM-EATING WARBLER (*Helminthos vermivorus*) is locally common in Howard County (Fig. 9) and was reported from 20 sub-blocks. BLUE-WINGED WARBLER (*Vermivora pinus*) has recently become a regular breeder in the county and has been recorded in 9 sub-blocks (Fig. 10) of 5 quads (Sykesville, Woodbine, Clarksville, Savage, and Relay). CERULEAN WARBLER (*Dendroica cerulea*) is a fairly common local breeder in the Piedmont (Stewart and Robbins, 1958). In Howard County (Fig. 11) this species was observed in 9 sub-blocks of 4 quads (Clarksville, Relay, Savage, and Sykesville). A rare breeder in the Piedmont, the PINE WARBLER (*Dendroica pinus*) requires mature stands of pine for nesting and was found (Fig. 12) in 6 sub-blocks of 3 quads (Relay, Clarksville, and Laurel). KENTUCKY WARBLERS (*Oporornis formosus*) are quite widespread (52 sub-blocks) and are concentrated along streams. HOODED WARBLERS (*Wilsonia citrina*) are concentrated along the floodplain areas of both river drainages (Fig. 13). This species requires a dense understory of shrubs such as sweet pepper-bush, southern arrow-wood, spicebush, mountain laurel, and great laurel (Stewart and Robbins, 1958).

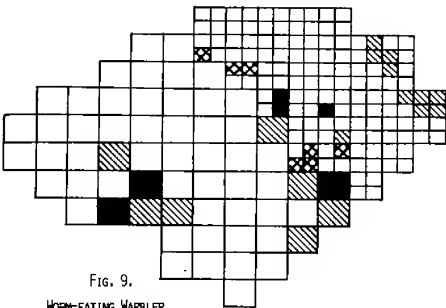


Fig. 9.
HORN-EATING WARBLER

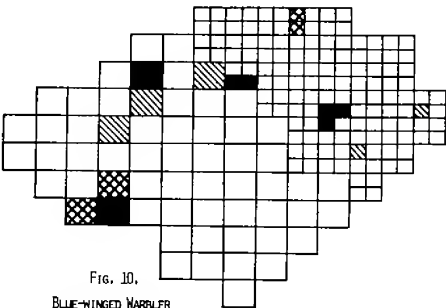


Fig. 10.
BLUE-WINGED WARBLER

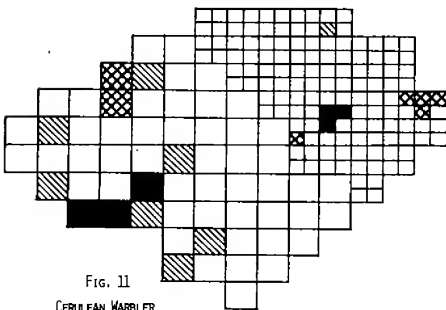


Fig. 11
CERULEAN WARBLER

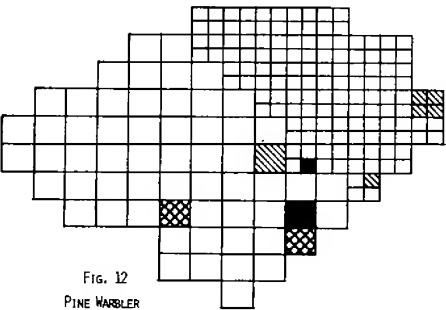


Fig. 12
PINE WARBLER

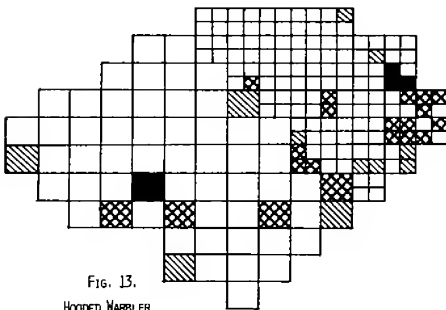


Fig. 13.
HOODED WARBLER

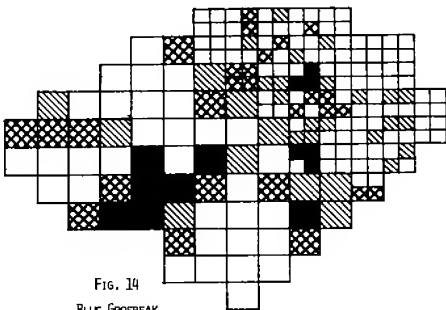


Fig. 14
BLUE GROSBEAK

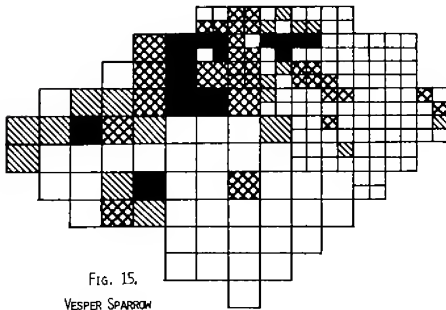


Fig. 15.
VESPER SPARROW

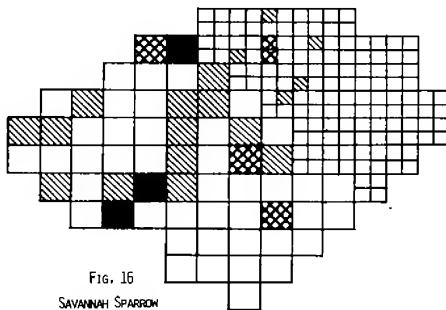


Fig. 16
SAVANNAH SPARROW

BLUE GROSBEAKS (*Guiraca caerulea*), birds of wood margins, hedgerows, and orchards in farming areas, are found (Fig. 14) in the southwestern part of the county (42 sub-blocks). Concentrated in the northwestern half of the county (Fig. 15), the VESPER SPARROW (*Poocetes gramineus*) is a common breeder in the agricultural areas.

INFORMATION NEEDED -- We would appreciate any observations for the Atlas project--from backyard observations to those from farther afield. The following species have not been confirmed in Howard County--Great Blue Heron, Least Bittern, Canada Goose, Black Duck, Blue-winged Teal, Ruffed Grouse, Turkey, Virginia Rail, Monk Parakeet, Black-billed Cuckoo, Short-eared Owl, Whip-poor-will, Common Nighthawk, Tree Swallow, Fish Crow, Brown Creeper, Veery, Warbling Vireo, Yellow-throated Warbler, Chestnut-sided Warbler, Summer Tanager, Savannah Sparrow (Fig. 16), Henslow's Sparrow, and Swamp Sparrow.

Several species that have not been located during the breeding season in the county and are certainly possibilities as breeders although they are all on our "prayer list"--Sharp-shinned Hawk, Upland Sandpiper, Alder Flycatcher, Long-billed and/or Short-billed Marsh Wrens, Loggerhead Shrike, House Finch, and Dickcissel. Anyone who wishes to participate or who locates one or more of the species listed should contact Joanne Solem--301-725-5037, Kathy Klimkiewicz--301-490-1491, or Chan Robbins--301-776-4880 (ext. 281) or 301-725-1176.

CONCLUSIONS

Several conclusions can be derived at the end of our first year.

1. When the entire Atlas area occupies only a few thousand square kilometers, there is a distinct advantage in using a grid of less than 5-km. The results can be efficiently mapped and observers have only to keep slightly more detailed records of where the birds are found within the block.
2. The mini-BBS routes were exceptionally valuable in reducing observer field effort. It is imperative that results be fed to the observers as quickly as possible to reap maximum benefits.
3. The workshops and additional information sent to the observers were very useful and should be a part of any Atlas program. Workshops created interest and solved many problems before they arose.
4. It is anticipated that this project can be successfully completed in its second year.

SUMMARY

In its first year the Howard County Breeding Bird Atlas recorded 121 species--97 confirmed, 14 probable, and 10 possible. Active nests were found for 78 species or 80% of the confirmed species.

ACKNOWLEDGEMENTS

We would like to thank Chan Robbins for his invaluable advice and guidance. Danny Bystrak designed and handled the mini-BBS routes as well as compiling the results. Larry Hood and Jay Sheppard assisted with the workshops. Special thanks are extended to Roxie Laybourne, U.S. Fish and Wildlife Service, for the loan of bird skins for the workshops. David Holmes prepared the final maps.

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- Klimkiewicz, M. K. and E. S. Buckler. 1971. Breeding Bird Atlas Project, Montgomery County, Maryland. Md. Birdlife 27(3):129-138.
Klimkiewicz, M. K. 1972. Breeding Bird Atlas of Montgomery County, Maryland. Md. Birdlife 28(4):130-141.
Stewart, R. E. and C. S. Robbins. 1958. Birds of Maryland and the District of Columbia. No. Am. Fauna 62:1-401.

13117 Larchdale Road, Apt. 2, Laurel
10617 Graeloach Road, Laurel



THIRD LIST OF CONTRIBUTORS FOR CAREY RUN SANCTUARY

We are pleased to acknowledge with thanks the contributions of 49 additional members and organizations. As shown by our progress thermometer, 37 percent of the \$40,000 purchase price has now been contributed. We wish to remind those members who would like to have a share in tripling the size of this important Sanctuary that a gift now will not only bring us closer to our goal, but also reduce our mortgage payments. All contributions are fully deductible for tax purposes.

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SNOWY OWL AT ANNAPOLIS, JANUARY 1-5, 1974

Hal Wierenga

On Tuesday, January 1, 1974, Dr. and Mrs. Philip Rose of Hillsmere Shores, Annapolis, received a call from their next-door neighbor, Mary Cavis, informing them they had a huge, white owl sitting on their roof. That afternoon, after a lengthy series of phone calls, including one to the National Zoo in Washington, D.C., the Roses were finally successful in getting the word to some local birders who promptly rushed out and identified the visitor as a Snowy Owl, *Nyctea scandiaca*. Not a bad way to start a new year's list--Snowy Owl on New Years Day!

The next day, the owl was rediscovered on another rooftop nearby, so I spread the word farther afield to Washington, Baltimore, and even beyond. Birders who subsequently came "from afar" were not disappointed, for the owl stayed in the Hillsmere community for the better part of four days, posing patiently and accommodatingly on various roofs and chimneys for each "wave" of visitors and their attendant cameras and lenses. The bird left the housing area on Wednesday and Thursday evenings, flew out over the adjoining South River, and was last seen each day perched atop distant channel markers, barely visible in the fading daylight. Fortunately, each morning it was back on the houses allowing close and satisfactory scrutiny by all.

But on Friday, the owl left Hillsmere about 10 a.m., flew out over the river, and did not return. This could have spelled much disappointment for the large crowd of birders expected over the weekend, but amazingly the bird was rediscovered Saturday morning on a jetty near the west end of the Chesapeake Bay Bridge, approximately nine miles (as the owl flies) from Hillsmere. It spent most of the day, January 5, in Sandy Point State Park, was admired by a continuous stream of appreciative birders and non-birders alike, and was last seen about 3 p.m. as it flew east across the Bay parallel to the bridge.

The owl was very heavily barred and flecked with dark brown feather edgings over most of its body; its face, underwings, and feet appeared pure white (see cover photo). Such a dark individual was almost certainly an immature bird and probably a female. During its five-day stay in the Annapolis area, it was not observed eating anything or casting any pellets, but it was seen making several unsuccessful passes at an Oldsquaw. It also flew to, and grabbed, a white laboratory rat I had released nearby, but merely flipped the rat up in the air and then returned to its perch on the beach at Sandy Point; hopefully this was an indication that the owl had been hunting successfully and was well fed.

Although Snowy Owls staged an invasion of major proportions in the West this winter, their southward flight was apparently only moderate in the East. This was the only authenticated occurrence in Maryland this season.

1216 Tyler Ave., Annapolis



THE SEASON

OCTOBER, NOVEMBER, DECEMBER, 1973

Chandler S. Robbins

The warm trend of the previous three months continued through the present period, with sectional mean temperatures averaging 1° to 2° above normal each of the three months. Precipitation was 1 to 2 inches below normal in October and November, but 2 to 3 inches above the long-term mean in December. Snowfall was negligible except on Dec. 9-11 in western Maryland, on Dec. 16-17 when a major storm affected all sections, and on Dec. 21 in the western counties. The first killing frost hit Garrett County on Oct. 18-19 and the rest of the State on Nov. 7-8. No zero temperatures were recorded in this 3-month period, although Millington on the Eastern Shore registered 1° on Dec. 19. The lowest official readings in Garrett County were 7° to 9° on Dec. 17-19. Weather data are from Climatological Data, Maryland and Delaware, Vol. 77, Nos. 10-12, U.S. Dept. of Commerce. The generally open late fall and winter contributed to the record-high number of southern stragglers on the Maryland Christmas Counts.

Tables 1 and 2 summarize the extreme arrival and departure dates for each reporting county. In each table the 10-year median date is compared with the median for 1973. A zero indicates that the species was not reported during the period and a "w" means that the final departure date was obscured by the presence of wintering individuals. A dash shows that the species was present, but no significant departure date was submitted. Dates of banding are underscored.

Thanks are expressed to the scores of observers who have made these tables possible. Those who submitted the great majority of reports from each county were: Garrett--Mrs. William Pope, Kendrick Hodgdon, Dorothea Malec, John Willetts; Allegheny--James Paulus, Kendrick Hodgdon, Dorothea Malec, John Willetts; Washington--Daniel Boone, Alice B. Mallonee; Fredrick--John W. Richards, Paul McKenzie; Baltimore City and County--Mr. and Mrs. Walter Bohanan, Mrs. Marian Glass, Mrs. Janet Ganter, Haven Kolb; Howard--Mrs. Joanne Solem, Morris R. Collins; Montgomery--Mrs. Margaret Donald, Dr. Robert L. Pyle, Peter Pyle, Paul and Joan Woodward, Nancy and Lucy MacClintock, Dr. Fred Evenden; Prince Georges--Paul and Danny Bystrak, Sam Lyon, Leonard Teuber, Chandler Robbins; Anne Arundel--Hal and Prof. Harold Wierenga, Danny Bystrak, Mark Hoffman, Prof. and Mrs. David Howard, Ellen Gizzarelli, Rena Bishop; Charles--Dr. George B. Wilmot, Leonard Teuber; Calvert--John H. Fales, Chandler and Eleanor

Table 1. Fall Arrival Dates for Late-arriving Species, 1973

Species	Median		Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Chas	Calv	Kent	QuAn	Caro	Talb	Dorc	Somr
	10-yr	1973																	
Common Loon	--	10/ 2	0	0	0	0	0	0	10/27	12/31	11/22	9/22	0	10/ 2	11/22	0	9/30	9/22	9/14
Horned Grebe	--	11/11	0	10/ 2	--	0	0	0	11/11	0	--	--	--	--	11/22	12/17	10/20	--	--
Whistling Swan	11/ 6	11/ 5	0	0	0	0	0	0	11/ 5	10/26	11/ 5	--	11/ 5	9/12	11/22	11/ 5	10/20	--	--
Snow Goose	--	11/ 2	11/ 8	0	0	11/ 9	0	0	0	0	10/28	0	0	12/ 1	0	10/29	--	9/28	--
Pintail	--	10/15	12/16	0	0	11/ 4	--	0	--	--	9/30	--	0	10/ 2	--	12/15	9/ 1	9/ 2	10/28
Green-winged Teal	--	9/22	--	9/ 6	0	9/22	--	0	--	9/30	9/10	0	11/25	--	0	12/17	10/27	9/ 2	9/15
American Widgeon	--	10/10	12/16	10/10	0	9/22	11/ 6	0	--	--	9/ 9	0	0	--	11/22	0	10/23	9/ 2	9/23
Redhead	--	11/25	11/23	0	0	0	0	0	12/16	12/31	12/30	0	11/25	0	11/22	12/24	11/11	9/22	--
Ring-necked Duck	--	11/14	12/ 1	11/ 2	0	12/20	0	0	0	11/14	11/10	--	--	0	0	12/15	0	--	10/28
Canvasback	--	11/16	11/23	0	0	0	--	0	12/16	10/26	11/ 8	--	11/25	11/ 8	11/22	12/18	11/ 3	11/11	--
Lesser Scaup	--	11/16	12/16	10/16	0	0	0	0	12/16	12/31	0	0	0	10/11	11/22	0	0	11/11	--
Common Goldeneye	--	11/ 5	12/16	0	0	0	0	0	W	--	11/ 5	--	--	0	0	11/ 4	11/ 4	11/11	--
Bufflehead	--	11/ 4	12/ 1	10/16	0	11/ 3	10/21	10/19	12/16	10/10	11/ 6	0	11/25	11/ 1	11/22	11/ 4	11/ 3	11/11	--
Oldsquaw	--	11/21	11/24	0	0	0	11/21	0	12/16	10/10	10/29	--	--	11/28	11/22	11/17	9/26	--	--
White-winged Scoter	--	10/12	0	0	0	0	0	0	0	0	11/ 3	0	0	10/12	11/22	0	9/12	9/23	--
Ruddy Duck	--	10/20	11/24	10/ 9	0	0	10/21	0	0	9/30	10/18	9/30	11/22	10/10	11/22	12/18	11/24	10/13	--
Rough-legged Hawk	--	11/11	--	0	11/ 4	11/18	0	--	0	12/31	0	0	0	0	0	0	11/10	11/11	--
American Coot	--	10/28	11/24	10/28	0	10/14	--	0	--	9/30	10/ 6	0	11/22	11/ 8	11/22	0	--	10/ 6	10/28
American Woodcock	--	11/ 3	10/10	10/29	11/10	11/16	--	--	10/28	--	10/16	--	11/ 9	10/21	0	11/ 8	11/11	--	--
Saw-whet Owl	--	--	0	0	0	0	0	0	11/13	11/17	12/26	0	0	10/26	0	0	0	0	0
Winter Wren	10/ 2	10/ 9	--	10/ 2	--	--	9/19	10/12	10/ 3	10/18	9/21	10/27	--	9/ 4	0	12/13	10/20	10/ 6	10/22
Hermit Thrush	10/11	10/ 6	9/30	10/12	10/28	10/ 6	10/ 1	9/30	10/ 1	10/16	9/30	10/14	10/19	9/24	0	11/ 4	10/ 7	10/ 6	10/21
Eastern Bluebird	--	10/18	9/30	--	--	--	--	10/10	9/24	10/27	10/24	--	10/24	10/19	--	--	10/18	9/30	--
Water Pipit	--	11/13	0	0	0	0	0	0	0	11/13	11/17	0	0	0	0	--	10/27	10/ 6	11/17
Rusty Blackbird	--	10/24	0	10/25	--	12/15	--	10/23	10/23	--	10/26	--	10/24	--	--	--	10/28	10/ 6	--
Evening Grosbeak	11/ 4	11/ 5	11/ 4	11/ 2	11/ 3	10/22	11/ 6	11/20	11/14	10/18	10/18	0	0	12/ 4	12/ 4	11/11	11/ 4	12/26	--
House Finch	--	11/ 4	11/26	11/ 4	--	10/25	12/ 1	11/11	10/30	11/21	10/18	0	11/ 6	10/30	0	0	10/28	0	--
Pine Siskin	--	10/16	12/16	10/19	0	1/ 4	10/15	12/17	10/ 9	10/17	10/14	10/27	11/ 5	10/15	0	10/18	9/30	10/ 6	--
Red Crossbill	--	11/ 2	0	0	10/13	0	0	0	0	10/28	11/ 7	0	0	0	11/11	0	10/28	12/ 1	--
Rufous-sided Towhee	--	10/ 1	--	--	10/ 1	--	10/ 9	10/12	9/30	--	10/ 4	9/30	10/16	9/30	--	--	9/23	--	--
Vesper Sparrow	--	--	10/ 9	--	--	--	--	--	--	0	11/ 5	0	0	10/25	0	0	11/11	0	0
Tree Sparrow	--	11/29	12/ 2	11/ 3	11/25	12/19	12/16	11/26	11/25	11/17	11/16	12/ 2	12/ 8	--	0	12/17	12/23	11/11	0
White-crowned Sparrow	10/14	10/ 6	9/30	10/16	10/ 6	--	10/15	10/ 4	9/30	10/ 4	10/21	0	0	10/21	0	10/18	10/ 7	10/ 6	--
Fox Sparrow	10/28	10/27	0	10/29	11/ 4	10/26	10/27	10/27	10/22	--	10/15	10/26	11/16	10/22	--	11/22	10/28	10/20	--

Robbins; Kent--Mr. and Mrs. Edward Mendinhal, Floyd Parks, Margery Plymire, Mary Anne Emerine, James Gruber, Robin Newlin; Caroline--Marvin W. Hewitt, Mrs. Ethel Engle, Mr. and Mrs. A. J. Fletcher, Alicia Knotts, S. Westre, V. Edwin Unger; Queen Annes--Richard Rowlett, Hal Wierenga; Talbot--Jan Reese, Harry Armistead; Dorchester--Harry Armistead; Somerset--Mrs. Richard D. Cole, Paul and Linda Bystrak, Charles Vaughn. For the first time in many years it has been necessary to omit Worcester, our coastal county, for lack of sufficient reports.

Loons and Grebes. The first Red-throated Loon of the season was seen at Ocean City on the early date of Oct. 7 (Robert Warfield). Common Loons were still migrating as late as Dec. 16, when 6 were found on Deep Creek Lake in Garrett County (Christmas Count); 4 Horned Grebes and 3 Pied-bills were on Deep Creek Lake the same day. A Horned Grebe found on the Hagerstown City Park lake on Dec. 29 (Christmas Count) was still present on Jan. 5.

Pelagic Birds. Two rare pelagics that should have been mentioned in previous reports were a Leach's Petrel seen in Chesapeake Bay off Kent Island on May 28, 1973 (the first May record for Maryland--Dr. Francis Williamson), and an Audubon's Shearwater seen 20 miles off Ocean City on Aug. 12 (3rd Maryland sighting--Richard Rowlett). A Great Cormorant was studied at the Ocean City Inlet on the early date of Dec. 9 (Rowlett and Charles Vaughn). The first 2 Gannets were sighted from Assateague Island on Oct. 6 (Dr. Prescott Ward).

Hérons. The mild autumn contributed to the rash of late heron departure dates: Green Heron in Anne Arundel County on Nov. 4 (Hal Wierenga), Little Blue Heron at Sandy Point on Oct. 15 (Hal Wierenga), Cattle Egret in Howard County on Nov. 3 (Joanne Solem), Common Egret in Denton on Dec. 28 (S. Westre), Snowy Egret at Sandy Point on Dec. 2 (Hal Wierenga), and Glossy Ibis (3rd winter record) at Elliott Island on Dec. 26 (Harry Armistead and party).

Swans and Geese. Mute Swans can now be found regularly at Eastern Neck Refuge, where Armistead counted 17 birds on Nov. 25. The general arrival of Whistling Swans occurred on Nov. 5, and the heaviest flight of the season was recorded on Nov. 11. As an example of the great numbers that now feed in large flocks away from the immediate vicinity of Chesapeake Bay, Westre estimated 1,600 individuals at Martinak State Park in Caroline County on Dec. 29. The highest tallies of Canada Geese came from the Eastern Shore Christmas Counts and reflected the continuing increase in this species as a wintering bird in tidewater Maryland: 97,755 in Lower Kent County, 46,693 at St. Michaels, and 46,800 at Blackwater Refuge and vicinity. One individual of the diminutive Hutchins race was identified at Bellevue in Talbot County on Oct. 27 and Nov. 3 (Armistead and Lars Egede-Nissen). After two unsuccessful nesting seasons, Brant were highly productive this summer, and there was a corresponding increase in the Maryland wintering population. In addition to the several Snow Goose arrival dates in Table 1, a sizable migration of 900 birds passed down Assateague Island in 2 hours on Oct. 20 (Warfield).

Ducks. One of the outstanding events of the fall migration period was the 'grounding' at Deep Creek Lake on Dec. 16 of a spectacular late overland migration of diving ducks that were presumably enroute from the Great Lakes to Chesapeake Bay. The coastal snowstorm, which turned out to be the heaviest of the winter, caused these migrants to take refuge on Deep Creek Lake, where they fed voraciously all day. See the account in Paul Bystrak's Christmas Count report. Oldsquaws and scoters were noted in greater numbers than usual in Chesapeake Bay, with peaks of 8,600 Oldsquaws and 1,200 White-winged Scoters around Kent Island on Nov. 22 (Rowlett and Hal Wierenga). The other hot spot for diving ducks was Ocean City Inlet, which harbored an adult male and 2 female Harlequin Ducks on Dec. 9 (Rowlett and Vaughn), and from that date onward played host to an ever-changing flock of eiders. On Dec. 9 there were 3 brown Common Eiders with an immature male and 2 female King Eiders, and on the Dec. 27 Christmas Count the totals were 4 Commons and 7 Kings.

Hawks. With all of the concentrated observations at Sandy Point State Park over the past two decades, it is astonishing that no major movement of hawks has been noted crossing the Bay there prior to this fall. On Nov. 8 Hal Wierenga counted 91 Red-tails and 5 Red-shoulders flying from Kent Island to Sandy Point into gentle southwest winds and his totals for October and November were 23 Sharp-shins, 5 Cooper's, 187 Red-tails, 21 Red-shoulders, and 8 Marsh Hawks. Could it be that the second span of the Bay Bridge, which was opened for traffic last summer, has increased the likelihood of hawks making their crossing of the Bay at this point? Or have we not had our eyes peeled for hawk migration when birding the Sandy Point area? The best late-fall tally from Monument Knob included a black-plumaged Red-tail (with an unbarred rufous tail) as well as 44 normal Red-tails, 2 Red-shoulders, and 2 Marsh Hawks on Nov. 4 (Wierenga). One of the greatest Goshawk incursions on record occurred this fall in a broad band from Minnesota to the Atlantic coast. The Hawk Mountain seasonal total was 326 Goshawks. Maryland reports, although few in number, were noteworthy in that the species normally is not found here at all. In addition to the following direct reports, at least an equal number were identified by falconers; single birds were seen at Graceham on Dec. 15 (Robbins), Oakland on Dec. 16 (Mrs. William Pope), and Talbot County on Dec. 23 (second county record--Denny Quirk and John Valliant). Peregrine Falcons had excellent nesting success in the Arctic, as shown by a 30-day total of 136 individuals migrating down Assateague Island, Sept. 20 through Oct. 19 (Dr. Prescott Ward and R. B. Berry); their peak count was of 28 birds on Oct. 5. A lingering Osprey was sighted at Blackwater Refuge on Nov. 11 (Berit Edsburg and Rowlett), two weeks after Ospreys had left other parts of the State.

Shorebirds. Purple Sandpipers were regular at Sandy Point State Park from Nov. 5 to Nov. 28, with a peak of 3 birds on Nov. 10 and 2 individuals on Nov. 7 and 11 (Hal Wierenga, Rowlett and others); this is only the third season the Purple Sandpiper has ever been found at this island location. Late records included an American Golden Plover at Old Town on Oct. 3 (James Paulus), 2 Buff-breasted Sandpipers at Assateague Island on Oct. 12 and a White-rumped Sandpiper there on Oct. 13 (Dr. Prescott Ward), a Pectoral Sandpiper at Blackwater Refuge on Dec. 1

Table 2. Latest Fall Departure Dates, 1973

Species	Median		Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Chas	Calv	Kent	QuAn	Caro	Talb	Dorc	Somr
	10-yr	1973																	
Pied-billed Grebe	--	11/23	12/16	12/ 5	11/25	11/21	--	--	--	--	--	--	--	--	11/11	10/ 8	W	W	W
Green Heron	10/ 2	9/30	--	10/ 4	--	9/22	9/20	10/11	10/ 4	--	11/ 4	9/16	9/27	--	--	--	10/21	9/29	9/30
Little Blue Heron	--	10/ 3	0	0	0	8/ 5	0	0	8/11	0	10/15	0	0	0	11/ 2	0	0	10/ 6	9/30
Cattle Egret	--	10/19	0	0	0	0	0	11/ 3	0	0	0	0	7/24	10/23	0	0	10/19	9/29	--
Common Egret	--	10/19	0	0	0	9/22	0	0	8/30	--	11/ 8	9/16	9/27	10/ 1	12/ 2	12/28	10/19	10/20	10/28
Snowy Egret	--	11/ 5	0	0	0	0	0	0	10/30	12/ 2	0	0	0	0	12/ 2	0	10/22	11/11	10/28
Canada Goose	--	10/28	12/16	10/31	--	--	11/ 7	10/21	10/27	--	W	10/28	W	W	W	10/16	W	W	W
Blue-winged Teal	--	9/28	0	10/ 9	0	9/22	0	0	9/21	--	9/28	0	0	0	9/28	0	0	10/27	9/16
Wood Duck	--	10/17	10/ 9	10/10	--	--	11/14	--	11/11	--	10/24	12/ 2	--	W	9/28	10/ 1	11/ 3	9/ 2	W
Broad-winged Hawk	9/30	9/30	--	--	9/29	10/14	9/30	9/16	9/30	9/ 8	0	--	10/ 6	0	0	0	9/16	10/ 6	0
Osprey	10/ 5	10/ 8	--	10/ 2	10/ 7	10/14	10/ 4	--	10/18	9/29	9/29	10/20	9/13	10/14	10/18	10/ 8	10/28	11/11	9/15
Semipalmated Plover	--	9/20	0	8/21	0	0	9/13	0	0	0	10/13	0	0	0	9/28	0	9/25	9/15	--
Golden Plover	--	--	0	10/ 3	0	0	0	0	0	0	9/27	0	0	0	0	0	0	9/23	0
Black-bellied Plover	--	10/14	0	8/29	0	0	0	0	11/ 4	0	9/21	0	0	0	0	0	9/30	10/27	10/28
American Woodcock	--	11/10	--	--	11/10	12/ 9	12/ 1	12/ 7	11/ 5	12/ 6	10/20	10/28	11/ 9	10/21	--	12/15	11/11	W	W
Upland Plover	--	--	--	0	0	0	0	0	0	0	9/18	0	0	0	8/ 7	0	0	9/ 4	0
Spotted Sandpiper	--	9/18	--	10/ 2	--	--	9/20	--	9/ 6	0	9/ 8	9/16	8/26	--	10/ 3	9/21	8/27	9/22	--
Greater Yellowlegs	10/26	10/26	0	10/31	0	0	0	0	10/23	0	9/27	0	0	0	11/11	10/24	9/15	11/11	10/28
Lesser Yellowlegs	--	9/22	0	7/22	0	9/22	9/11	0	9/15	0	9/28	0	0	0	0	0	0	10/20	10/28
Pectoral Sandpiper	--	10/13	0	10/16	0	9/22	9/13	0	9/15	0	10/13	0	0	0	0	0	0	12/ 1	10/28
Least Sandpiper	--	9/15	0	9/ 1	0	0	0	0	9/15	0	10/29	0	9/13	0	9/28	0	9/12	9/15	--
Semipalmated Sandpiper	--	9/28	0	0	0	0	0	0	9/15	0	12/ 1	0	0	0	9/28	0	8/27	10/20	--
Laughing Gull	--	11/ 8	0	0	0	0	9/26	0	0	11/30	12/ 9	10/20	11/ 6	9/23	11/22	0	11/11	11/11	10/28
Bonaparte's Gull	--	12/ 9	12/16	0	0	0	0	0	12/29	11/14	12/ 9	0	0	0	0	0	12/ 8	0	0
Forster's Tern	--	11/10	0	0	0	0	0	0	0	0	11/12	0	9/16	0	0	0	11/10	11/11	10/28
Common Tern	--	9/23	0	10/ 2	0	0	0	0	0	0	9/14	0	0	0	9/28	0	9/23	9/23	0
Royal Tern	--	--	0	0	0	0	0	0	0	0	10/25	0	0	0	0	0	10/ 7	10/ 6	10/28
Caspian Tern	--	--	0	0	0	0	0	0	0	0	9/25	0	9/16	0	0	0	9/29	10/ 6	0
Yellow-billed Cuckoo	9/30	9/30	--	10/17	9/22	9/24	9/20	10/12	10/11	10/23	10/ 9	10/ 4	9/26	9/21	--	9/30	9/23	9/29	10/17
Black-billed Cuckoo	--	10/ 2	10/ 2	10/ 4	0	8/25	0	--	10/ 9	0	10/14	0	0	9/20	0	0	9/15	0	0
Whip-poor-will	--	9/12	--	9/15	0	9/10	9/12	9/ 7	--	--	--	--	--	--	0	--	--	9/22	--
Common Nighthawk	9/14	9/23	10/ 5	9/ 7	9/23	8/25	9/28	9/ 6	9/30	9/23	9/29	--	9/ 7	9/20	0	--	8/15	--	9/28
Chimney Swift	10/ 8	10/10	--	10/ 5	10/ 9	10/14	10/13	10/12	10/12	10/12	10/ 6	10/14	10/ 5	10/ 9	--	10/ 9	10/13	9/29	--
Ruby-thr. Hummingbird	9/18	9/30	--	10/ 1	10/ 6	9/19	10/ 4	9/24	9/30	10/ 2	9/29	9/23	8/29	9/27	9/28	9/22	9/30	9/22	--
Yellow-shafted Flicker	--	10/24	--	10/27	11/ 4	--	10/21	10/30	10/ 7	10/28	10/ 5	W	10/28	10/16	W	W	10/21	W	W
Yellow-bellied Sapsucker	--	10/30	12/16	11/ 4	W	W	10/29	10/31	11/ 7	W	10/18	W	W	10/14	--	W	10/21	W	W
Eastern Kingbird	9/ 8	9/13	--	9/13	8/ 6	10/11	9/11	9/ 4	8/31	8/29	9/ 7	9/30	9/21	9/18	--	--	9/16	9/23	--
Great Crested Flycatcher	9/14	9/22	--	9/ 4	9/ 9	10/ 4	--	9/16	9/24	9/22	9/13	--	--	9/29	--	9/17	10/26	9/23	--

March 1974

MARYLAND BIRDLINE

Table 2. Latest Fall Departure Dates, 1973 (cont.)

Species	Median		Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Chas	Calv	Kent	QuAn	Caro	Talb	Dorc	Somr
	10-yr	1973																	
Eastern Phoebe	10/21	10/30	--	--	11/ 4	--	10/ 6	10/22	11/ 2	--	--	--	9/30	10/28	--	12/15	11/ 3	11/11	10/11
Acadian Flycatcher	--	9/17	0	9/30	9/15	9/17	--	9/15	9/25	9/13	9/29	9/23	9/16	9/ 2	--	9/20	--	--	--
Yellow-bellied Flycatcher	--	9/20	0	8/21	0	10/ 3	0	0	9/28	9/10	9/16	9/11	0	10/ 3	0	0	9/23	0	0
Trail's Flycatcher	--	--	--	0	0	--	--	--	10/ 8	0	0	9/28	0	9/12	0	0	0	0	0
Least Flycatcher	--	9/26	9/12	9/23	0	0	11/17	9/ 4	9/30	9/ 8	9/30	9/30	0	9/30	0	0	0	0	9/15
Eastern Wood Pewee	10/ 2	10/ 6	10/ 3	10/ 4	10/ 7	10/24	10/22	10/ 1	10/ 9	10/ 3	10/ 5	10/14	9/29	10/14	--	10/ 5	10/ 7	10/ 6	10/11
Tree Swallow	10/16	10/20	--	0	8/ 4	9/22	0	0	10/22	--	11/29	0	9/29	11/ 1	--	10/19	9/30	11/11	12/17
Bank Swallow	--	9/28	0	0	--	--	0	0	9/28	0	9/10	0	9/ 5	0	9/28	10/17	9/15	10/ 6	0
Rough-winged Swallow	--	--	--	--	--	9/22	--	--	9/28	--	--	--	--	--	--	--	--	9/22	--
Barn Swallow	9/13	9/15	--	9/ 4	9/15	9/22	9/ 6	9/ 5	10/10	9/20	10/31	8/26	8/25	--	--	--	9/30	9/29	9/15
Cliff Swallow	--	--	--	0	0	9/22	0	0	9/28	0	0	0	0	0	0	0	0	9/22	0
Purple Martin	--	9/ 4	--	--	8/ 6	--	--	--	9/29	9/16	--	9/ 2	9/ 6	--	--	--	--	8/28	--
Blue Jay	--	--	W	W	W	W	W	W	11/ 2	10/27	W	W	10/23	W	W	W	10/ 7	W	W
Red-breasted Nuthatch	--	10/26	--	11/ 3	--	10/14	11/21	W	W	10/27	W	W	W	10/24	W	W	10/ 7	W	W
House Wren	10/ 4	10/ 7	--	10/ 4	9/ 1	10/ 6	10/16	10/ 5	11/ 4	10/ 7	10/10	9/16	9/ 6	10/22	--	--	10/ 7	10/ 6	10/20
Catbird	10/16	10/22	10/ 9	10/19	10/ 9	10/26	10/17	10/23	10/27	10/18	11/11	10/22	10/15	10/28	--	11/ 4	11/22	10/20	10/22
Brown Thrasher	10/14	10/20	12/16	10/ 3	10/27	9/25	10/10	10/ 8	11/17	10/28	10/18	10/20	10/18	10/23	--	12/28	11/22	10/20	10/20
Wood Thrush	10/ 8	10/17	10/ 2	10/29	9/30	10/ 6	10/19	--	10/18	10/ 7	10/17	10/19	9/24	10/23	--	10/ 2	10/17	10/ 6	10/22
Hermit Thrush	10/30	11/ 6	12/16	11/ 3	10/28	11/ 9	12/ 2	11/ 4	11/24	11/17	11/ 4	10/20	10/28	10/28	--	--	11/21	W	11/ 7
Swainson's Thrush	10/10	10/14	10/ 9	10/ 8	9/30	10/14	10/31	10/ 6	10/27	10/16	10/25	10/21	10/15	11/ 8	0	--	10/11	10/ 6	10/ 1
Gray-cheeked Thrush	10/ 7	10/14	10/ 3	9/20	9/30	0	10/20	9/27	10/14	10/23	10/22	10/14	0	10/15	0	10/29	10/11	10/19	10/ 1
Veery	9/23	9/30	--	--	9/29	--	9/28	--	10/ 8	9/19	10/ 4	9/30	0	10/26	--	--	9/30	9/23	0
Blue-gray Gnatcatcher	9/14	9/18	--	9/21	8/29	--	--	9/27	9/20	8/31	10/19	8/26	9/13	--	--	--	--	9/23	9/16
Ruby-crowned Kinglet	11/ 2	11/22	10/22	11/ 3	11/25	12/19	12/ 3	11/ 4	11/24	10/31	11/ 8	10/28	12/11	11/20	12/ 4	--	12/10	12/ 1	10/21
Water Pipit	--	11/17	0	0	0	0	0	0	11/12	11/13	11/22	0	0	0	11/11	12/15	12/23	0	11/17
Cedar Waxwing	--	11/11	12/16	--	10/ 7	11/21	--	10/29	11/ 2	11/11	10/19	10/14	9/28	10/24	12/ 4	12/ 8	11/15	12/ 1	11/17
White-eyed Vireo	9/22	9/29	0	0	--	8/25	9/12	9/30	9/30	9/ 4	9/28	9/29	10/ 6	9/27	--	10/ 5	10/ 7	9/23	9/29
Yellow-throated Vireo	--	9/16	0	9/15	9/ 9	--	--	9/16	--	9/15	10/14	9/16	9/16	--	--	10/ 5	10/ 7	0	10/ 7
Solitary Vireo	10/14	10/ 9	10/ 9	11/19	10/ 6	10/ 3	0	10/ 6	10/18	0	10/ 9	0	0	10/23	0	0	0	10/ 6	0
Red-eyed Vireo	10/ 4	10/ 4	10/10	10/ 4	9/30	10/ 4	10/ 5	9/30	10/16	10/ 6	10/20	10/14	9/20	10/21	--	9/21	9/20	9/30	--
Philadelphia Vireo	--	--	10/ 2	0	9/30	0	0	0	9/16	0	9/18	0	0	0	0	0	0	0	0
Black-and-white Warbler	10/ 4	10/ 6	9/25	9/ 4	9/30	10/ 6	10/ 4	10/18	10/28	10/10	10/10	9/30	9/24	10/ 3	10/23	10/16	10/ 7	10/ 6	--
Worm-eating Warbler	--	9/19	0	10/ 3	9/15	--	9/30	--	9/19	--	9/ 9	--	--	0	--	0	0	--	--
Blue-winged Warbler	--	9/16	0	0	8/26	--	--	9/12	9/22	0	9/19	0	0	9/16	0	0	0	0	0
Tennessee Warbler	10/ 2	10/ 4	10/ 4	10/ 3	9/16	10/ 6	9/29	10/ 5	10/16	10/11	9/28	9/11	0	10/22	0	0	9/ 9	10/ 6	9/15
Nashville Warbler	10/ 5	10/ 4	9/19	10/ 4	9/30	10/ 6	9/13	10/ 3	10/ 8	10/17	9/20	0	0	10/24	0	0	9/30	10/ 6	0
Parula Warbler	9/30	10/ 6	--	9/26	0	10/ 6	10/ 5	10/ 6	10/14	10/10	9/30	10/ 4	9/24	10/ 3	--	10/ 5	10/ 7	10/ 6	10/ 7
Magnolia Warbler	10/ 4	10/ 6	10/11	10/ 3	10/ 7	10/ 6	10/10	9/24	10/15	10/ 6	10/ 9	10/ 4	9/24	10/22	0	10/ 8	9/29	10/ 6	9/30

Species	Median		Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Chas	Calv	Kent	QuAn	Caro	Talb	Dore	Somr
	10-yr	1973																	
Cape May Warbler	10/ 4	10/ 2	<u>10/21</u>	11/19	9/16	10/ 6	<u>9/26</u>	9/28	--	10/11	10/ 9	<u>9/30</u>	9/24	<u>9/30</u>	0	10/ 5	9/30	10/20	0
Black-thr. Blue Warbler	10/ 8	10/ 8	<u>10/28</u>	9/ 4	9/30	10/ 6	<u>10/19</u>	10/11	<u>10/16</u>	10/10	10/ 9	10/ 7	9/24	<u>10/28</u>	0	10/ 3	10/ 7	10/ 6	<u>10/21</u>
Myrtle Warbler	11/ 4	10/30	<u>10/28</u>	<u>10/ 6</u>	10/14	--	--	11/ 4	<u>11/24</u>	10/28	10/16	--	11/ 3	<u>10/31</u>	--	10/ 5	11/15	--	<u>10/22</u>
Black-thr. Green Warbler	10/ 6	10/ 8	<u>10/ 1</u>	<u>10/ 7</u>	10/ 1	10/14	<u>9/30</u>	10/10	10/14	10/ 8	10/ 9	0	0	10/ 8	0	0	10/21	10/ 6	0
Blackburnian Warbler	9/26	9/24	--	--	9/24	9/12	<u>9/22</u>	9/25	10/ 9	--	9/16	0	9/24	10/ 8	0	0	8/28	10/ 6	0
Chestnut-sided Warbler	9/28	9/22	--	9/ 4	9/30	9/19	9/22	9/22	10/14	<u>9/ 9</u>	9/25	9/16	9/16	10/10	0	9/21	9/23	10/ 6	0
Bay-breasted Warbler	9/30	9/30	<u>10/10</u>	<u>9/21</u>	9/30	9/24	9/29	10/ 5	9/24	9/30	9/16	--	9/16	<u>9/30</u>	0	10/ 5	0	10/ 6	0
Blackpoll Warbler	10/ 8	10/ 3	<u>10/ 4</u>	<u>9/23</u>	9/30	10/ 3	10/ 5	0	10/11	10/ 2	10/ 9	--	9/24	<u>10/23</u>	0	9/26	9/30	10/ 6	0
Pine Warbler	--	9/30	<u>9/20</u>	10/ 8	9/16	10/ 3	0	9/15	9/16	--	10/10	--	9/27	0	0	0	10/14	10/20	9/30
Prairie Warbler	--	9/21	<u>10/ 4</u>	10/ 8	--	10/ 6	--	9/19	9/20	--	9/21	9/16	9/ 6	--	--	--	9/23	--	--
Palm Warbler	10/22	10/14	<u>9/19</u>	9/26	10/14	10/ 2	0	11/ 1	10/22	10/ 2	10/17	10/ 4	10/20	10/28	11/22	0	10/20	12/ 1	10/20
Ovenbird	10/ 7	10/ 2	<u>10/ 3</u>	<u>10/ 1</u>	9/30	9/11	10/16	10/ 1	10/24	<u>10/ 6</u>	10/17	10/20	9/24	<u>10/25</u>	--	10/ 3	9/27	9/23	<u>10/ 1</u>
Northern Waterthrush	10/ 2	9/27	--	9/ 7	--	--	<u>10/ 8</u>	0	<u>10/ 9</u>	<u>9/22</u>	10/ 9	9/30	9/16	<u>9/19</u>	0	9/22	<u>9/27</u>	9/30	--
Louisiana Waterthrush	--	9/ 5	--	--	8/12	--	--	9/12	--	--	10/ 7	8/22	<u>9/ 5</u>	--	--	--	--	0	--
Kentucky Warbler	--	9/ 6	0	10/ 3	8/24	9/19	--	8/25	9/16	--	9/ 3	--	8/15	<u>9/10</u>	--	--	0	--	--
Connecticut Warbler	9/28	9/30	<u>9/19</u>	<u>9/22</u>	--	0	<u>9/29</u>	0	<u>10/16</u>	10/10	<u>10/ 4</u>	9/30	0	<u>9/24</u>	0	0	0	0	9/30
Mourning Warbler	--	--	--	0	0	--	<u>9/12</u>	0	9/23	9/17	0	9/ 8	0	0	0	0	0	0	0
Yellowthroat	10/14	10/19	<u>10/10</u>	10/10	--	--	10/25	10/20	10/22	10/16	10/28	10/19	10/14	10/20	10/27	--	10/12	9/30	12/ 1
Yellow-breasted Chat	10/ 9	9/28	--	--	10/14	--	<u>10/ 9</u>	10/20	<u>10/ 3</u>	<u>9/ 7</u>	9/ 1	<u>9/29</u>	7/18	<u>9/29</u>	--	9/23	--	10/ 6	9/28
Hooded Warbler	--	9/10	<u>9/20</u>	9/ 1	9/ 1	10/ 4	9/11	--	<u>9/22</u>	--	<u>9/10</u>	<u>9/ 1</u>	8/25	0	0	0	0	0	0
Wilson's Warbler	--	9/19	--	10/ 3	--	9/19	9/13	9/19	10/10	10/ 5	9/15	0	0	<u>9/13</u>	0	0	0	0	0
Canada Warbler	9/18	9/21	--	9/ 4	9/15	9/12	9/21	9/22	10/ 7	<u>9/15</u>	10/15	9/16	9/24	<u>9/30</u>	0	10/ 3	<u>9/13</u>	0	0
American Redstart	9/30	10/ 4	<u>10/ 3</u>	<u>9/21</u>	9/30	9/27	10/ 5	10/11	11/16	<u>9/30</u>	10/11	10/ 4	9/24	<u>10/ 3</u>	0	10/ 7	<u>10/ 5</u>	10/ 6	<u>10/ 1</u>
Bobolink	--	9/15	<u>9/ 2</u>	--	0	0	0	0	9/30	9/13	9/27	0	9/ 5	0	0	9/ 7	9/30	9/30	9/15
Orchard Oriole	--	8/10	0	--	--	7/14	--	--	8/10	--	8/ 1	8/12	7/14	<u>9/21</u>	--	8/25	--	--	--
Baltimore Oriole	9/22	9/23	--	9/ 1	9/23	12/18	12/ 3	9/ 5	9/29	10/ 7	9/12	--	--	<u>9/21</u>	0	9/16	--	9/30	--
Scarlet Tanager	10/ 4	10/ 6	<u>9/19</u>	<u>10/ 8</u>	9/30	9/19	10/10	10/ 7	10/15	10/ 4	10/ 6	10/ 4	9/16	10/31	--	10/ 5	--	10/ 6	--
Rose-breasted Grosbeak	9/30	10/ 7	<u>9/25</u>	10/10	10/ 7	10/ 7	10/ 5	10/10	10/ 7	10/ 6	10/ 4	10/ 7	9/19	12/ 2	0	9/30	9/16	10/ 6	0
Blue Grosbeak	--	10/ 2	0	0	11/ 1	0	--	--	10/11	--	9/25	10/ 4	9/11	<u>10/ 2</u>	--	--	9/30	10/ 6	9/15
Indigo Bunting	10/ 6	10/ 2	<u>9/18</u>	9/26	8/29	--	<u>10/15</u>	10/ 5	<u>10/17</u>	--	10/14	10/ 4	9/29	<u>10/ 2</u>	--	--	9/16	10/ 6	10/ 1
Rufous-sided Towhee	10/29	10/24	--	--	10/ 7	11/ 9	<u>10/27</u>	11/28	10/22	--	11/ 3	--	10/19	--	--	10/11	--	--	--
Savannah Sparrow	--	10/26	10/21	--	--	--	0	11/12	--	0	11/ 3	--	10/23	<u>10/28</u>	--	--	--	--	10/22
Vesper Sparrow	--	10/31	10/21	10/ 2	--	--	--	--	--	--	11/ 7	0	10/23	11/ 8	0	0	11/11	0	0
Chipping Sparrow	10/26	10/27	10/ 9	11/23	10/ 7	11/ 7	10/21	10/29	<u>10/25</u>	10/19	11/18	--	11/ 5	11/ 8	--	--	11/11	10/20	<u>10/22</u>
White-crowned Sparrow	--	10/28	10/21	--	W	W	12/ 3	--	10/21	--	11/ 3	<u>10/22</u>	0	10/22	0	11/ 8	<u>11/ 8</u>	--	0
Fox Sparrow	11/24	11/23	0	0	11/25	11/24	12/20	11/29	11/25	--	W	--	11/16	<u>10/30</u>	11/22	11/22	--	W	11/21
Lincoln's Sparrow	--	10/11	<u>10/10</u>	0	0	0	0	0	10/11	0	10/24	<u>9/29</u>	0	0	0	0	11/ 4	0	0
Swamp Sparrow	--	10/28	<u>10/ 3</u>	--	--	--	--	--	<u>11/13</u>	<u>10/25</u>	--	<u>10/28</u>	--	<u>11/ 4</u>	--	--	<u>11/17</u>	--	<u>10/22</u>

(Rowlett), a Semipalmated Sandpiper at Sandy Point on Dec. 1 (Hal Wierenga), and a Wilson's Phalarope at Old Town on Oct. 3 (Paulus).

Gulls. The only Glaucous Gull of the period was seen from Assateague Island, flying offshore with Great Black-backed Gulls during gale-force southerly winds on Dec. 9 (Rowlett and Vaughn). The warm weather probably was responsible for Laughing Gulls being present at Sandy Point and at Ocean City (18 birds) on the late date of Dec. 9 (Hal Wierenga, Rowlett, and Vaughn). Also late for inland locations were 12 Bonaparte's Gulls at Deep Creek Lake on Dec. 16 (Christmas Count) and 2 at Edwards Ferry in Montgomery County on Dec. 29 (Warfield). Dec. 27 was the great gull day at Ocean City Inlet with three European species (Lesser Black-backed, Black-headed, and Little Gull) among the nine kinds recorded there (Christmas Count).

Cuckoos, Nighthawks, Hummingbirds. Late departure dates seemed to be the rule this year. There were Yellow-billed Cuckoo sightings in October in seven counties, with the latest at the Patuxent Research Center near Laurel on the 23rd (Crawford Greenewalt, Mr. and Mrs. Albert Conway, Robbins). Common Nighthawk departures averaged nine days later than usual and an Oct. 5 observation in Garrett County (Mrs. Pope) was notable. There were three October records of Ruby-throated Hummingbirds, the latest of which was in Washington County on Oct. 6 (Daniel Boone).

Owls, Woodpeckers. Saw-whet Owls arrived late and in very low numbers. A Long-eared Owl was seen at Denton on Nov. 10 (Westre) and another was resident in the owl grove at Sandy Point State Park after Dec. 7 (Wierenga). Among the many highlights of the now famous Garrett County Christmas Count on Dec. 16 were a Red-headed Woodpecker and 2 Yellow-bellied Sapsuckers; there still is no mid-winter record for either species in that county.

Flycatchers and Swallows. Jan Reese found an extraordinarily late Great Crested Flycatcher in Talbot County on Oct. 26. An Empidonax flycatcher banded in Baltimore on Nov. 17 was identified as a Least Flycatcher (Mrs. Janet Ganter); there is no previous Maryland record in November for any bird in this genus. A Tree Swallow was seen as late as Nov. 29 at Sandy Point (Hal Wierenga); the 4 Barn Swallows he found there on Oct. 31 may have been blown back from the south by tropical storm Gilda, which passed through our offshore waters on Oct. 28-29.

Chickadees, Nuthatches, Wrens. An influx of Black-capped Chickadees invaded Fran Pope's hilltop yard at Mountain Lake Park in the early afternoon of Oct. 20. There was no other evidence of a migration of this species. Red-breasted Nuthatches were late in arriving and were so few in number that most observers missed them. Winter Wrens, on the other hand, were unusually numerous and good numbers remained for the winter. From all indications Carolina Wrens are more common in Maryland this winter than ever before, thanks to a succession of mild and open winters. A Bewick's Wren netted and banded on Oct. 30 was not only an addition to the "Adventure" list, but a real rarity for Montgomery County (Mrs. Margaret Donnalld).

Thrushes, Gnatcatchers. Late departure dates for thrushes included a Wood Thrush banded in Allegany County on Oct. 29 (Kendrick Hodgdon), a Swainson's Thrush in Kent County on Nov. 8 (Mendinhalls), a Gray-cheeked Thrush at Denton on Oct. 29 (Roberta Fletcher), and a Veery banded at Damsite on Oct. 26 (Dorothy Mendinhall), one day short of the State record. A Blue-gray Gnatcatcher seen at Bayside Beach near Hancock's Resolution in northern Anne Arundel County on Oct. 19 (Shirley Geddes) set a new late departure record for Maryland--excluding those November, December, and January birds that have attempted to winter.

Vireos. Philadelphia and Warbling Vireos made a poor showing in the fall migration. The Red-eyed was present in normal numbers and departed on schedule with the last two banded on Oct. 20 at the Bodensteins' estate on Round Bay in Anne Arundel County (Danny Bystrak) and Oct. 21 at Damsite in Kent County (Mendinhalls). A Yellow-throated Vireo banded on Oct. 14 at Round Bay (Bystrak), however, was very late; and a Solitary Vireo banded on Nov. 19 in Allegany County (Hodgdon) was four days beyond the latest previous State record.

Warblers. The October warbler migration was less than spectacular, owing in part to the unexplained scarcity of the Myrtle Warbler, which normally is our most abundant passerine migrant. There were several late departure dates, especially in Garrett County where for the first time in October a netting station was operated regularly at the Pleasant Valley camp near Bittering (Dorothea Malec). The following departures are from her station: Cape May Warbler on Oct. 21, Black-throated Blue on Oct. 28, Bay-breasted on Oct. 10, and Prairie Warbler on Oct. 4. Elsewhere, the following dates are noteworthy: Black-and-white Warbler banded at "Adventure" near Potomac on Oct. 28 (Margaret Donnalld), Tennessee banded on Oct. 22 and Nashville banded on Oct. 24 at Damsite (Mendinhalls), Orange-crowned Warbler seen at Laurel on Nov. 25 (Rowlett), Cape May Warbler at LaVale in Allegany County on Nov. 19 (killed against Ken Hodgdon's window), Black-throated Blue Warbler banded on Oct. 28 and Ovenbird banded on Oct. 25 at Damsite (Mendinhalls), Louisiana Waterthrush at Bryans Road on the record-breaking date of Oct. 7 (Dr. George Wilmot), Kentucky Warbler at Old Town on Oct. 3, two days short of the State record (Paulus), and Canada Warbler in Anne Arundel County on Oct. 15 (Hal Wierenga).

Finches and Sparrows. Cardinals were unusually numerous this fall, and there seemed to be much more wandering than usual. Jan Reese, banding daily at St. Michaels, captured 2 or 3 new birds per day from Sept. 1 to Sept. 26, then had nearly a dozen new ones on Sept. 27; similar peaks occurred on Oct. 7 and Nov. 12, although the trapping effort remained constant. Reese at St. Michaels and Robbins at Laurel commented on the scarcity of Indigo Buntings throughout the fall migration period. Single Dickcissels arrived at feeders in St. Michaels in mid-November (John Valliant, Denny Quirk, and Jeff Effinger) and Columbia on Nov. 19 (Erv Klaas). House Finches continued to increase; the top tally reported was 160 at an Ocean City feeder on Dec. 9 (Rowlett and Vaughn). Although Evening Grosbeaks were scarce, there was an exceptionally heavy influx of Pine Siskins. Red Crossbills also were present, but these were

largely limited to loblolly pines along the coast. A very late Lincoln's Sparrow was studied through a telescope at Bellevue in Talbot County on Nov. 4 (Armistead).

U.S. Fish and Wildlife Service, Laurel

1973 SUMMARY OF IRISH GROVE SANCTUARY ACTIVITIES

Charles R. Vaughn

In MB: 28, pp.142-43 I summarized 1972 activities at Irish Grove. A similar summary shows that fewer days (125 versus 141) and nights (80 versus 101) were in use at Irish Grove during 1973. However, these days were more active, with 465+ people visiting, compared with about 289 in 1972. Nine non-M.O.S. groups versus thirteen last year visited, including Towson High School, Sherman Wildlife Sanctuary, N. J., Univ. of Maryland entomology class, Towson State College, Goucher College, and Salisbury State College. In addition, a crew from the British Broadcasting Corporation filmed banding for possible use in a documentary on bird migration.

Organized trips to Irish Grove were made by the Kent, Wicomico, and Anne Arundel County Chapters; and, as usual, Irish Grove served as headquarters for the Crisfield Christmas Count.

Besides banding by the indefatigable Gladys Cole, Butch Norden and Beth Ball collected lichens for the Towson State College Herbarium, Brian Sharp continued his Seaside Sparrow study, David and Barbara Lee continued their various biological studies, and Paul Bystrak virtually finished the observation tower on Round Pond. In addition, the Wicomico Chapter built and delivered a redwood picnic table with two benches.

The majority of the custodial and maintenance requirements were, as usual, either performed or overseen by Ed Unger. Without the continuous efforts of Ed, Paul Bystrak and Gladys Cole the Irish Grove house would be far less hospitable than it is.

Several facts concerning use of Irish Grove during 1973 should be of concern to everyone so that a recurrence of the events can be avoided. In March of 1973 Irish Grove was visited and found to have a space heater running in the house. The previous log entry indicates the heater to have been running at least five days! Needless to say this was extremely dangerous, especially for an old farm house with marginal wiring. A second danger is the gas stove. There have been several incidents where lighting of the pilot light has caused minor burns. Great care should be taken when lighting the stove.

1306 Frederick Avenue, Salisbury



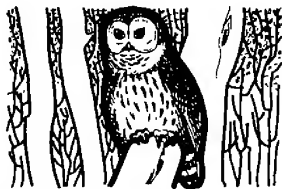
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THE PRESIDENT'S PAGE



At the meeting of the Trustees on March 16, a subject of much discussion was the best way to keep the money coming in for paying off the mortgage on the Carey Run Sanctuary addition. There are three sources: (1) Contributions from MOS members, (2) Contributions from MOS Chapters, and (3) Contributions from nonmembers who become interested in our purpose.

A look at contributions from the membership to date shows \$14,825 received from 292 memberships (many including a husband-wife family membership). Except for one gift of stock certificates that netted MOS \$2,731.72, donations ranged from \$1 to \$500, with the majority from \$25 to \$50. There are approximately 1,650 memberships comprising our 2,300 members. If we consider that each membership is a potential source of a contribution, there are still 1,358 memberships not heard from.

If these 1,358 contributors give an average of only \$10, the mortgage would be reduced to \$3,320. Contributions from Chapters and nonmembers could then reduce the mortgage to zero and we could look to new fields of activity to keep the MOS serving more projects. All of this could happen in 1974. Chapter contributions toward Carey Run have ranged from \$100 to \$1,000. Those Chapters that have not contributed should consider the matter at their next board meeting.

In January I sent a letter to all new members of MOS. I stated, "If you know someone who is keenly interested in conservation and/or birds and who has a desire to give or leave money to be used for those causes, let him know that MOS is a logical beneficiary. Our sanctuary program has inspired several benefactors whose bequests have been a very significant factor in the expansion of our program."

Your attendance at the convention in Ocean City affords an opportunity to learn how MOS functions and to hear reports from our committee chairmen. If you can't be there, watch for the June issue of *Maryland Birdlife* to see what the various committees have done. My thanks go to all committee members for their support.

Our First Vice President, Floyd Parks, has given outstanding performance in finding a new place in Ocean City for our convention and for making arrangements with the Santa Maria Motor Hotel.

Since the death of Mr. Gilman Paul, from whom MOS leased Rock Run Sanctuary, the property has been acquired by Susquehanna State Park and the fate of our operation there has been in doubt. It now appears that

we will be able to lease the house and one acre of land and to continue maintaining trails, feeding the birds, etc. However, visiting members are requested to carry their membership cards.



Barclay E. Tucker

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